KAC-34

KitchenAid

TECHNICAL EDUCATION

SELF-CLEANING SLIDE-IN ELECTRIC RANGE

Models KESC300H, KESC307H, KESH307H

JOB AID 4317335

FORWARD

This KitchenAid Job Aid, “Self-Cleaning Slide-In Electric Range,” (Part No. 4317335), provides the technician with information on the installation, operation, and service of the Self-Cleaning Slide-In Electric Range. It is to be used as a training Job Aid and Service Manual. For specific information on the model being serviced, refer to the “Use and Care Guide,” or “Wiring Diagram” provided with the electric range.

The Wiring Diagram and Strip Circuits used in this Job Aid are typical and should be used for training purposes only. Always use the Wiring Diagram supplied with the product when servicing the unit.

GOALS AND OBJECTIVES

The goal of this Job Aid is to provide detailed information that will enable the service technician to properly diagnose malfunctions and repair the KitchenAid Self-Cleaning Slide-In Electric Range.

The objectives of this Job Aid are to:

- Understand and follow proper safety precautions.
- Successfully troubleshoot and diagnose malfunctions.
- Successfully perform necessary repairs.
- Successfully return the range to its proper operational status.

WHIRLPOOL CORPORATION assumes no responsibility for any repairs made on our products by anyone other than Authorized Service Technicians.

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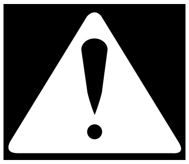
GENERAL

SAFETY FIRST

Your safety and the safety of others is very important.

We have provided many important safety messages in this Job Aid and on the appliance. Always read and obey all safety messages.



This is the safety alert symbol.
This symbol alerts you to hazards that can kill or hurt you and others.
All safety messages will follow the safety alert symbol and either the word “DANGER” or “WARNING.” These words mean:

⚠DANGER **You can be killed or seriously injured if you don’t immediately follow instructions.**

⚠WARNING **You can be killed or seriously injured if you don’t follow instructions.**

All safety messages will tell you what the potential hazard is, tell you how to reduce the chance of injury, and tell you what can happen if the instructions are not followed.

⚠WARNING

Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

⚠WARNING

Electrical Shock Hazard

Plug into a grounded 3-prong outlet.

Do not remove ground prong.

Do not use an adapter.

Do not use an extension cord.

Failure to follow these instructions can result in death, fire, or electrical shock.

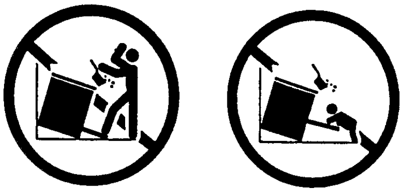
⚠WARNING

Electrical Shock Hazard

Electrically ground range.

Failure to do so can result in death, fire, or electrical shock.

⚠WARNING



Tip-Over Hazard

A child or adult can tip the range and be killed.

Connect anti-tip bracket to rear range foot.

Reconnect the anti-tip bracket, if the range is moved.

Failure to follow these instructions can result in death or serious burns to children and adults.

IMPORTANT
Electrostatic Discharge (ESD) Sensitive Electronics

ESD problems are present everywhere. ESD may damage or weaken the electronic control assembly. The new control assembly may appear to work well after repair is finished, but failure may occur at a later date due to ESD stress.

- Use an antistatic wrist strap. Connect the wrist strap to the green ground connection point, or to an unpainted metal surface in the appliance.

- OR -

- Touch your finger repeatedly to a green ground connection point, or to an unpainted metal surface in the appliance.
- Before removing the part from its package, touch the antistatic bag to a green ground connection point, or to an unpainted metal surface in the appliance.
- Avoid touching electronic parts, or terminal contacts. Handle the electronic control assembly by the edges only.
- When repackaging the failed electronic control assembly in an antistatic bag, observe the previous instructions.

KITCHENAID MODEL & SERIAL NUMBER DESIGNATIONS

MODEL NUMBER

MODEL NUMBER	K	ES	C	30	0	H	BL	4

INTERNATIONAL SALES IND.
OR MARKETING CHANNEL
IF PRESENT

PRODUCT GROUP

K = KITCHENAID

PRODUCT IDENTIFICATION

DD = DUAL FUEL DROP-IN / SLIDE-IN
DR = DUAL FUEL RANGE
ED = ELECTRIC DROP-IN RANGE
EE = ELECTRIC EYE-LEVEL RANGE
ER = ELECTRIC STANDARD RANGE
ES = ELECTRIC SLIDE-IN RANGE
GD = GAS DROP-IN RANGE
GE = GAS EYE-LEVEL RANGE
GR = GAS STANDARD RANGE
GS = GAS SLIDE-IN RANGE

MERCHANDISING SCHEME

C = CERAMIC GLASS TOP
H = CERAMIC W/HALOGEN
I = IMPERIAL
P = PROFESSIONAL / COMMERCIAL
S = STANDARD
T = TEMPERED GLASS TOP

CAPACITY / SIZE / SERIES / CONFIGURATION

1ST POSITION	2ND POSITION
1 = DROP-IN	0 = 30″ WIDE
2 = DROP-IN / SLIDE-IN COMBO	6 = 36″ WIDE
3 = SLIDE-IN	
4 = COMMERCIAL	
5 = STANDARD	
7 = EYE-LEVEL	
8 = 48″	
9 = 60″	

FEATURES

0 = STANDARD FEATURES
2 = PLUS FEATURES OR SEALED BURNERS W / GRILL / CONVECTION OVEN
3 = SEALED BURNERS W / GRIDDLE / CONVECTION OVEN
4 = SEALED BURNERS W / GRILL & GRIDDLE / CONVECTION OVEN
5 = DELUXE FEATURES
7 = DELUXE FEATURES / CONVECTION OR SEALED BURNERS / CONVECTION OVEN

YEAR OF INTRODUCTION

H = 1999, J = 2000, K= 2001, L - 2002

COLOR CODE

BL = BLACK, WH = WHITE, BT = BISCUIT
BS = BLACK ON STAINLESS

ENGINEERING CHANGE (NUMERIC)

SERIAL NUMBER

SERIAL NUMBER	IM	K	31	73981

MANUFACTURING SITE

IM = MONTMAGNY

YEAR OF PRODUCTION

K = 2000, L = 2001, M = 2002

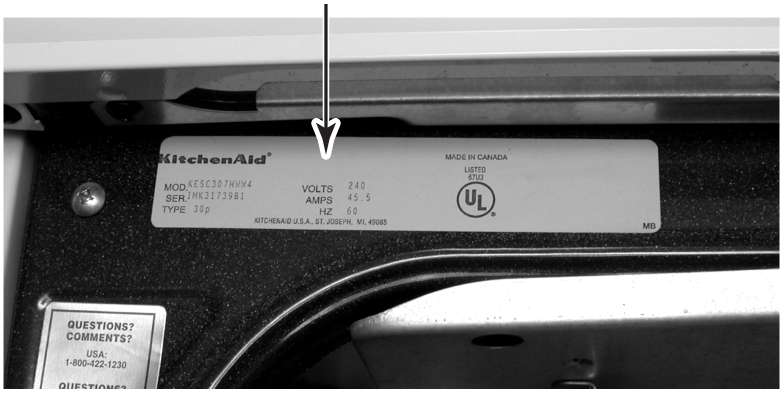
WEEK OF PRODUCTION

31 = 31ST WEEK

PRODUCT SEQUENCE NUMBER

MODEL & SERIAL NUMBER LABEL LOCATION

The Model/Serial Number label location is shown below.



Model & Serial Number Location
(Located Behind Storage Drawer)

KitchenAid®
MOD. KESC307HWW4
SER. IMK3173981
TYPE 30p
VOLTS 240
AMPS 45.5
HZ 60
KITCHENAID U.S.A., ST. JOSEPH, MI, 49085
MADE IN CANADA
LISTED
67U3
UL
MB
QUESTIONS?
COMMENTS?
USA:
1-800-422-1230

SPECIFICATIONS

Model	KESC300H WH/BL/BT	KESC307H WH/BT/BS	KESH307H WH/BL/BS
Model Description	Slide-In	Slide-In	Slide-In Radiant/Halogen
Dimensions/Specifications			
Exterior Dimensions			
Height To Maintop (in)	36"	36"	36"
Overall Depth Inc Hrdwr/Hndl (in)	26.75"	26.75"	26.75"
Depth Without Handle (in)	24.5"	24.5"	24.5"
Door Swing (in)	21.75"	21.75"	21.75"
Shipping Weight (lbs)	160	160	160
Exterior			
Cabinet Finish	Painted	Painted	Painted
Front Frame	Porcelain	Porcelain	Porcelain
Leveling Legs	Yes	Yes	Yes
Oven Window Size and Type	Large/Glass	Large/Glass	Large/Glass
Removable Door and Hinges	Yes	Yes	Yes
Door Liner Finish	Porcelain	Porcelain	Porcelain
Door Type	Glass	Glass	Glass
Control Panel Location	Front	Front	Front
Control Panel Color	White	White	White
Control Panel Construction	Glass	Glass	Glass
Control Knob Type, #, Fcn	Infinite Switch Single Blade	Infinite Switch Single Blade	Infinite Switch Single Blade
Simmer Specialty Switch	Yes	Yes	Yes
Keep Warm Switch	Yes	Yes	Yes
Cooktop Features			
Cooktop Material	Ceran Top	Ceran Top	Ceran Top
Hot Surface Indicator	4 Neon Cluster	4 Neon Cluster	4 Neon Cluster
Burner Box Finish	Galvanized	Galvanized	Galvanized
Cooktop Support Rods	No	No	No
Electric Cooktop Element	Yes	Yes	Yes
Electric Element Configuration	6", 7", 8", 9.5"	6", 7", 8", 9.5"	6", 7", 8", 9.5"
Electric Element Type	Radiant	Radiant	Radiant
Electric Right Front Size	7"	7"	7"
Electric RF Output (w@240/208v)	1800W	1800W	1800W/Halogen
Electric Left Front Size	9.5"	9.5"	9.5"
Electric LF Output (w@240/208v)	2500W/1500W	2500W/1500W	2500W/1500W
Electric Right Rear Size	8"	8"	8"
Electric RR Output (w@240/208v)	2200W	2200W	2200W
Electric Left Rear Size	6"	6"	6"
Electric LR Output (w@240/208v)	1500"	1500"	1500"
Oven Controls	EOC	EOC	EOC
Oven Control Type	Glass Capacitive	Glass Capacitive	Glass Capacitive
Oven Control Location	Front	Front	Front
Control Lock Out	Yes	Yes	Yes
Delayed Cooking Option	Yes	Yes	Yes
Timer	in EOC	in EOC	in EOC

Model	KESC300H WH/BL/BT	KESC307H WH/BT/BS	KESH307H WH/BL/BS
Interior			
Main Oven			
Cooking System	Conventional	Fan Convection	Fan Convection
Cleaning System	Self Cleaning	Self Cleaning	Self Cleaning
Auto Self Clean Latch	Yes	Yes	Yes
Oven Liner Finish	Porcelain	Porcelain	Porcelain
Oven Volume (cu ft)	3.62 cu ft	3.28	3.28
Oven Height (in)	15.75"	15.75"	15.75"
Oven Width (in)	23 1/16"	23 1/16"	23 1/16"
Oven Depth (in)	18.25"	16 5/16"	16 5/16"
Rack Guides #	5	5	5
Oven Racks #	2	3	3
Oven Rack Type & # Each	2 Flat		
Oven Rack	Yes	Yes	Yes
Broiler Pan	Yes	Yes	Yes
Broiler Pan Finish	Porcelain	Porcelain	Porcelain
Broiler Pan Grid Finish	Porcelain	Porcelain	Porcelain
Oven Light Number	1 Incandescent	2 Incandescent	2 Incandescent
Main Electric Oven	Yes	Yes	Yes
Hidden Bake Element	No	Yes	Yes
Bake (W@240/208v)	2500W		
Broil Inner Elem (W@240/208v)	1665W	1665W	1665W
Broil Outer Elem (W@240/208v)	1000W	1000W	1000W
Oven Lower Panel/ Door	Yes	Yes	Yes
Drawer/Panel Front	Painted	Painted	Painted
Storage Drawer Liner	Yes	Yes	Yes
Drawer/Panel Height (in)	5.1"	5.1"	5.1"
Drawer/Panel Width (in)	23.3"	23.3"	23.3"
Drawer/Panel Depth (in)	20"	20"	20"
Glides	Nylon Rollers	Nylon Rollers	Nylon Rollers
Lower Drawer Handle Type/Material	Formed at Top	Formed at Top	Formed at Top
Lower Drawer Handle Color	White	White	White
Product Literature			
Cookbook	No	Yes	Yes
Installation Instructions	9752043 B	9752043 B	9752043 B
Tech Sheet	9753027	9753027	9753027
Use & Care Guide	Yes	Yes	Yes
Other	Ceran Polish Incl	Ceran Polish Incl	Ceran Polish Incl
Agency Approvals	UL,CSA	UL,CSA	UL,CSA
Anti-tip Device With Unit	Floor	Floor	Floor

KITCHENAID ELECTRIC RANGE WARRANTY

LENGTH OF WARRANTY	**KITCHENAID WILL PAY FOR:**
FULL ONE YEAR WARRANTY From Date of Purchase.	Replacement parts and repair labor costs to correct defects in materials or workmanship. Service must be provided by a KitchenAid designated servicing outlet.
SECOND THROUGH FIFTH YEAR LIMITED WARRANTY From Date of Purchase.	Replacement parts for any electric element to correct defects in materials or workmanship. Replacement ceramic glass if breakage is due to defects in materials or workmanship. Replacement parts for solid state touch control system to correct defects in materials or workmanship.
SECOND THROUGH TENTH YEAR LIMITED WARRANTY From Date of Purchase.	Replacement parts for the porcelain oven cavity / inner door if the part rusts through due to defects in materials or workmanship.

KITCHENAID WILL NOT PAY FOR:

A. Service calls to:
   1. Correct the installation of the range.
   2. Instruct you how to use the range.
   3. Replace house fuses or correct house wiring.

B. Repairs when range is used in other than normal, single family household use.

C. Damage resulting from accident, alteration, misuse, abuse, fire, flood, acts of God, improper installation, or installation not in accordance with local electrical codes.

D. Any labor costs during the limited warranties.

E. Replacement parts or repair labor costs for units operated outside the United States and Canada.

F. Pickup and delivery. Your range is designed to be repaired in the home.

G. Repairs to ceramic glass cooktop if it has not been cared for as recommended in the Use and Care Guide.

H. Repairs to parts or systems resulting from unauthorized modifications made to the appliance.

I. In Canada, travel or transportation expenses to customers who reside in remote areas.

KITCHENAID OR KITCHENAID CANADA DO NOT ASSUME ANY RESPONSIBILITY FOR INCIDENTAL OR CONSEQUENTIAL DAMAGES. Some states or provinces do not allow the exclusion or limitation of incidental or consequential damages, so this exclusion or limitation may not apply to you. This warranty gives you special legal rights, and you may also have other rights which vary from state-to-state or province-to-province.

Outside the United States and Canada, a different warranty may apply. For details, please contact your authorized KitchenAid dealer.

If you need service first see the “Troubleshooting” section of the Use and Care Guide. After checking ”Troubleshooting,” additional help can be found by checking the “Requesting Assistance or Service” section, or by calling our Customer Interaction Center telephone numbers, listed below, from anywhere in the U.S.A. or Canada.

KitchenAid: **1-800-422-1230**
Canadian Residents call: **1-800-807-6777**

— NOTES —

INSTALLATION INFORMATION

ELECTRICAL SUPPLY REQUIREMENTS

⚠WARNING

Electrical Shock Hazard

Electrically ground range.

Failure to do so can result in death, fire, or electrical shock.

GENERAL

If codes permit, and a separate grounding wire is used, it is recommended that a qualified electrician determine that the grounding path is adequate.

Do not ground to a gas pipe.

Check with a qualified electrician if you are not sure that the range is grounded.

Do not have a fuse in the neutral or ground circuit.

1. When a 4-wire or 3-wire, single-phase, 120/240-volt, 60-Hz, AC-only electrical supply is available, a 50-ampere maximum circuit protection is required, (or, if specified on the model/serial plate, when a 4-wire, or 3-wire, single-phase, 120/208-volt, 60 Hz, AC-only electrical supply is available, a 40-ampere maximum circuit protection is required), fused on both sides of the line. A time-delay fuse, or circuit breaker is recommended. The model/serial rating plate is located behind the storage drawer (see page 1-4).
2. Wire sizes and connections must conform to the requirements of the National Electrical Code, ANSI/NFPA 70—latest edition*, or CSA Standard C22.1, Canadian Electrical Code, Part 1—latest edition**, and all local codes and ordinances for the kilowatt rating of the range.

Copies of the standards listed may be obtained from:

* **National Fire Protection Association**
Batterymarch Park
Quincy, Massachusetts 02269

** **CSA International**
8501 East Pleasant Valley Road
Cleveland, Ohio 44131-5575

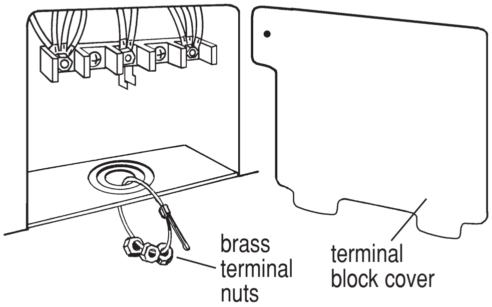
3. This range can be connected directly to the fused disconnect, or circuit breaker box, through flexible, armored, or nonmetallic sheathed, copper cable (with ground wire). Locate the junction box to allow two to three feet of slack in the line so that the range can be moved, if servicing is ever necessary. Do not cut the conduit.

   A U.L.-listed conduit connector must be provided at each end of the power supply cable, at the range, and at the junction box. Wire sizes, (copper wire only), and connections, must conform with the rating of the range.

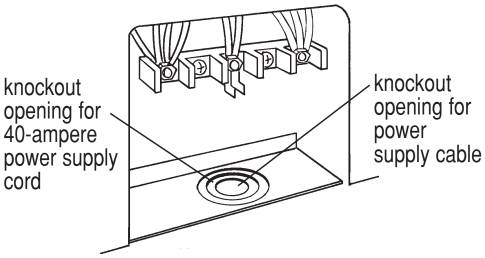
ELECTRICAL CONNECTIONS (Not used for Canadian Installations)

This range can be connected directly to the fused disconnect, or circuit breaker box, through flexible, armored, or nonmetallic sheathed, copper cable with a grounding wire. Allow two to three feet of slack in the line so that it can be moved if servicing is ever necessary.

A U.L.-listed conduit connector must be provided at each end of the power supply cable at the range, and at the junction box.



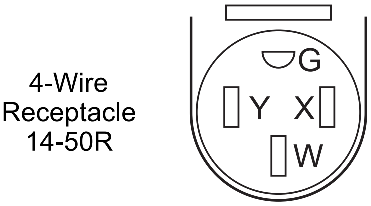
Remove the terminal block cover located on the back of the range.


knockout opening for 40-ampere power supply cord
knockout opening for power supply cable

Depending on the electrical supply, make the 4-wire or the 3-wire connection to the range, following the instructions under the “Power Supply Cord Connection,” (page 2-3), or the “Direct Wire Connection” (page 2-5).

4-Wire Electrical System

This range is manufactured with the ground connected to the cabinet. The ground must be revised so that the green grounding wire of the 4-wire power supply cord is connected to the cabinet (refer to the “4-wire Electrical Connection” section).



When a 4-wire receptacle of NEMA type 14-50R is used, a matching U.L.-listed, 4-wire, 250-volt, 40-ampere range power supply cord (pigtail) must be used.

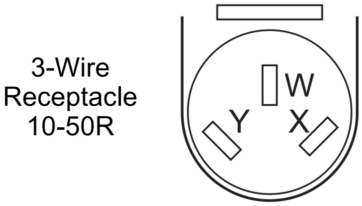
This cord contains four copper conductors with ring terminals at the appliance end, terminated in a NEMA type 14-50P plug on the supply end. The fourth (grounding) conductor must be identified by a green or green/yellow cover, and the neutral conductor by a white cover. The cord should be type SRD, or SRDT, with a U.L.-listed strain relief, and be at least four feet long.

The minimum conductor sizes for the copper 4-wire power cord are:

(2) #8 conductors
(1) #10 white neutral
(1) #8 green grounding

3-Wire Electrical System

Local codes may permit the use of a U.L.-listed, 250-volt, 40-ampere range power supply cord (pigtail). This cord contains three # 10 copper wires, and matches a three-wire receptacle of NEMA Type 10-50R.



Connectors on the appliance end must be provided at the point the power supply cord enters the appliance.

POWER SUPPLY CORD CONNECTION

⚠WARNING

Electrical Shock Hazard

Turn power supply off before connecting wires.

Electrically ground range.

Failure to do so can result in death, fire, or electrical shock.

Warning: Improper connection of the equipment-grounding conductor can result in a risk of electric shock.

Check with a qualified electrician, or serviceman, if you are in doubt as to whether the appliance is properly grounded.

Do not modify the power supply cord plug. If it will not fit the outlet, have a proper outlet installed by a qualified electrician.

1. Disconnect the power supply.
2. Remove the screws from the terminal block cover.
3. Remove the 3/8″ brass nuts that are attached to the knockout opening and set them aside. Use these brass nuts to secure the ring-type terminals on the power supply cord to the terminal block screws.

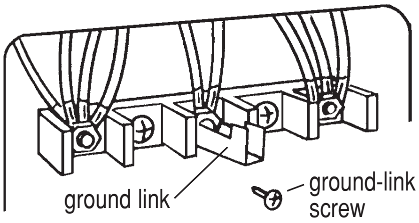
NOTE: Use only ring-type terminals to connect the power supply cord.

4. Remove the knockout for the 40-ampere power supply cord.
5. Mount a U.L.-listed strain relief in the knockout opening.
6. Insert the power supply cord through the strain relief, and allow enough slack so you can easily attach the wiring to the terminal block.
7. Depending on the type of electrical system, proceed to “4-Wire Electrical Connection,” or “3-Wire Electrical Connection,” (on page 2-4), and complete the wiring.

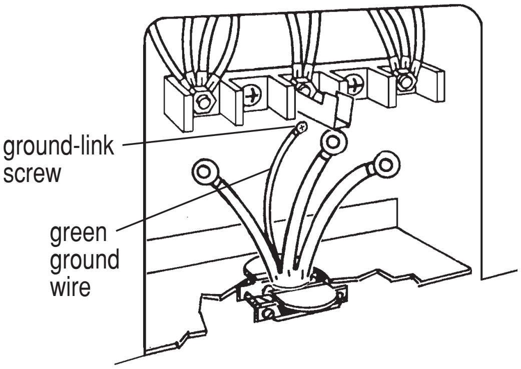
4-Wire Electrical Connection

Use this method for mobile homes, and whenever 4-wire installation is required.

1. Remove the ground-link screw from the range frame and set the screw aside.
2. Bend the ground link up so that it does not contact the range.

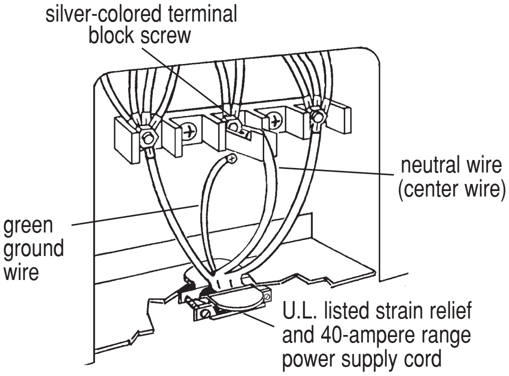


3. Connect the green ground wire on the power supply cord to the ground link screw hole in the range with the ground-link screw you removed earlier. Make sure that the bare ground wire does not contact the adjacent terminal block connections.



NOTE: Do not loosen the factory-installed nuts on the terminal block when you perform the following steps.

4. Connect the neutral (white) wire of the power supply cord to the center, silver-colored terminal screw on the terminal block, and secure it with one of the 3/8″ brass nuts that you set aside earlier.
5. Connect the remaining two power supply cord wires to the outer terminals of the terminal block, and secure them with 3/8″ brass nuts.
6. Tighten the strain relief screws to secure the power supply cord.
7. Install the terminal block cover.

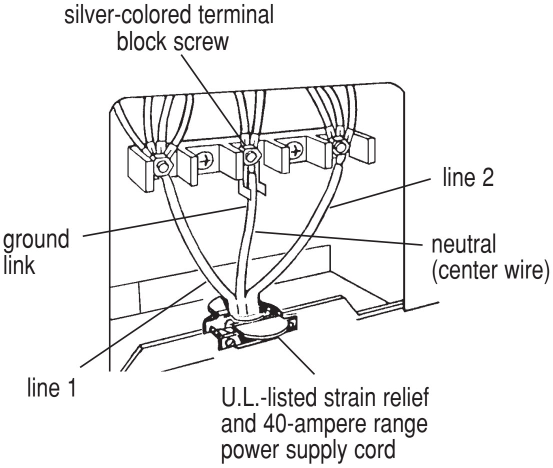

silver-colored terminal block screw
neutral wire (center wire)
green ground wire
U.L. listed strain relief and 40-ampere range power supply cord

3-Wire Electrical Connection

Use this method only if local codes permit connecting a cabinet-grounded conductor to the neutral wire of the power supply cord.

NOTE: Do not loosen the factory-installed nuts on the terminal block when you perform the following steps.

1. Connect the neutral (white) wire of the power supply cord to the center, silver-colored terminal screw on the terminal block, and secure it with one of the 3/8″ brass nuts that you set aside earlier.
2. Connect the remaining two power supply cord wires to the outer terminals of the terminal block, and secure them with 3/8″ brass nuts.
3. Tighten the strain relief screws to secure the power supply cord.
4. Install the terminal block cover.


silver-colored terminal block screw
line 2
ground link
neutral (center wire)
line 1
U.L.-listed strain relief and 40-ampere range power supply cord

DIRECT WIRE CONNECTION

⚠WARNING

Electrical Shock Hazard

Turn power supply off before connecting wires.

Electrically ground range.

Failure to do so can result in death, fire, or electrical shock.

This range must be connected to a grounded, metallic, permanent wiring system, or a ground connector should be connected to the ground terminal, or to the ground wire lead on the range.

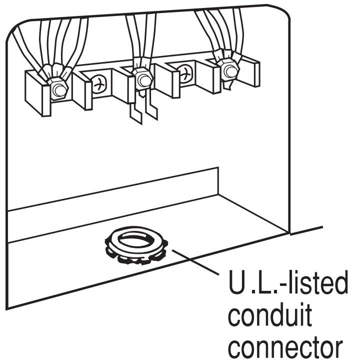
The conductors at the terminal block must be copper wire only.

If the house has aluminum wiring, perform steps 1 through 3, otherwise skip those steps.

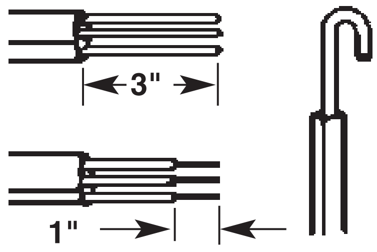
1. Connect a section of 8-gauge, solid copper wire to the terminal block.
2. Connect the aluminum wiring to the added section of copper wire using special connectors that were designed by Underwriters Laboratories for joining copper to alu minum. Follow the procedure recom mended by the manufacturer to connect the wires.
3. The aluminum-to-copper connections must conform with local codes and industry accepted wiring practice.
4. Disconnect the power supply.
5. Remove the screws from the terminal block cover.
6. Remove the 3/8″ brass nuts that are attached to the knockout opening and set them aside. Use these brass nuts to secure the ring-type terminals on the power supply cord to the terminal block screws.

NOTE: Use only ring-type terminals to connect the power supply cord.

7. Remove the knockout for the 40- ampere power supply cord.
8. Mount a U.L.-listed strain relief in the knockout opening.



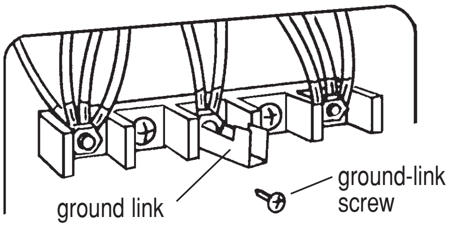
9. Strip 3″ of outer covering from the end of each wire on the power supply cord.
10. Form a hook in the bare wire ends of the power supply cord.



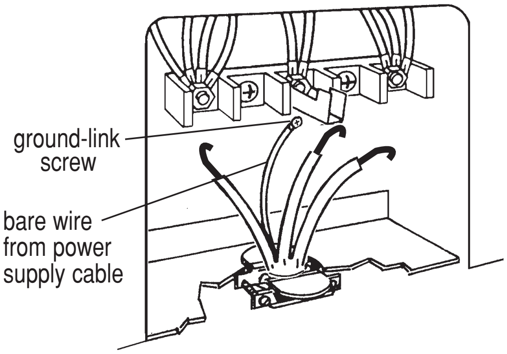
11. Insert the power supply cord through the strain relief, and allow enough slack so you can easily attach the wiring to the terminal block.
12. Depending on the type of electrical system, proceed to “4-Wire Electrical Connection,” (on page 2-6), or “3-Wire Electrical Connection,” (on page 2-7), and complete the wiring.

4-Wire Electrical Connection

1. Remove the ground-link screw from the range frame and set the screw aside.
2. Bend the ground link up so that it does not contact the range.

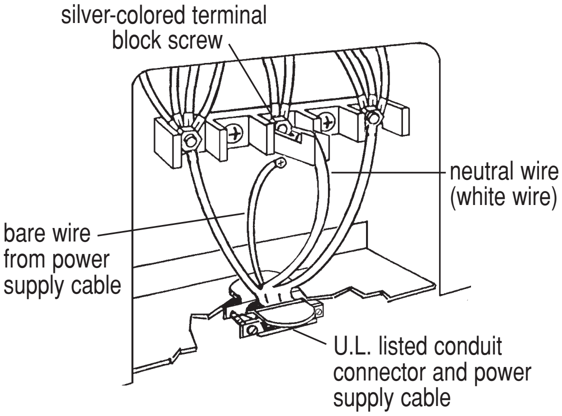

ground link
ground-link screw

3. Connect the green ground wire on the power supply cord to the ground link screw hole in the range with the ground-link screw you removed earlier. Make sure that the bare ground wire does not contact the adjacent terminal block connections.


ground-link screw
bare wire from power supply cable

NOTE: Do not loosen the factory-installed nuts on the terminal block when you perform the following steps.

4. Connect the neutral (white) wire of the power supply cord to the center, silver-colored terminal screw on the terminal block, and secure it with one of the 3/8″ brass nuts that you set aside earlier.
5. Connect the remaining two power supply cord wires to the outer terminals of the terminal block, and secure them with 3/8″ brass nuts.
6. Tighten the strain relief screws to secure the power supply cord.
7. Install the terminal block cover.

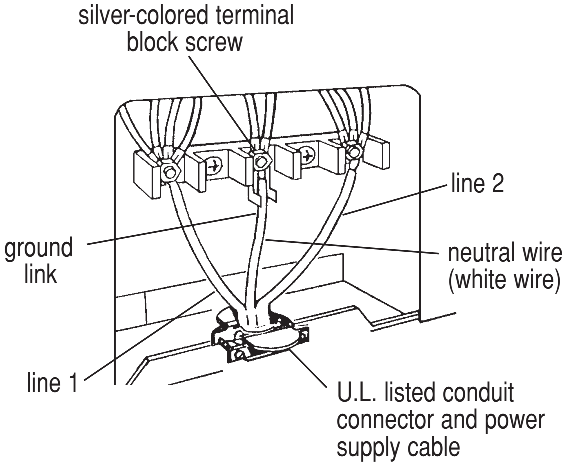

silver-colored terminal block screw
neutral wire (white wire)
bare wire from power supply cable
U.L. listed conduit connector and power supply cable

3-Wire Electrical Connection

Use this method only if local codes permit connecting a cabinet-grounded conductor to the neutral wire of the power supply cord.

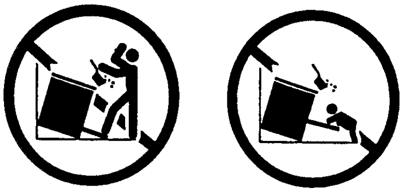
NOTE: Do not loosen the factory-installed nuts on the terminal block when you perform the following steps.

1. Connect the neutral (white) wire of the power supply cord to the center, silver-colored terminal screw on the terminal block, and secure it with one of the 3/8″ brass nuts that you set aside earlier.
2. Connect the remaining two power supply cord wires to the outer terminals of the terminal block, and secure them with 3/8″ brass nuts.
3. Tighten the strain relief screws to secure the power supply cord.
4. Install the terminal block cover.


silver-colored terminal block screw
line 2
ground link
neutral wire (white wire)
line 1
U.L. listed conduit connector and power supply cable

MOVING THE RANGE

⚠WARNING



Tip-Over Hazard

A child or adult can tip the range and be killed.

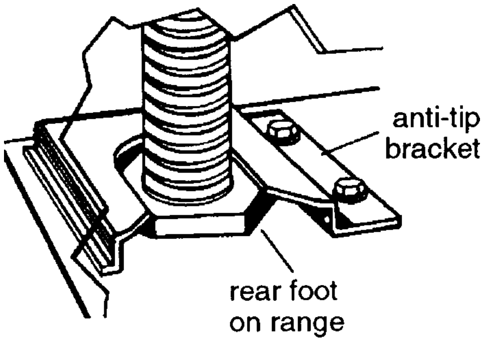
Connect anti-tip bracket to rear range foot.

Reconnect the anti-tip bracket, if the range is moved.

Failure to follow these instructions can result in death or serious burns to children and adults.

Before moving the range, slide it onto a piece of cardboard, or hardboard, to prevent damaging the floor covering, and perform the following steps:

1. Unplug range or disconnect power.
2. Slide the range forward and disengage the foot with the anti-tip bracket. **IMPORTANT:** Make sure the anti-tip bracket is securely attached to floor.



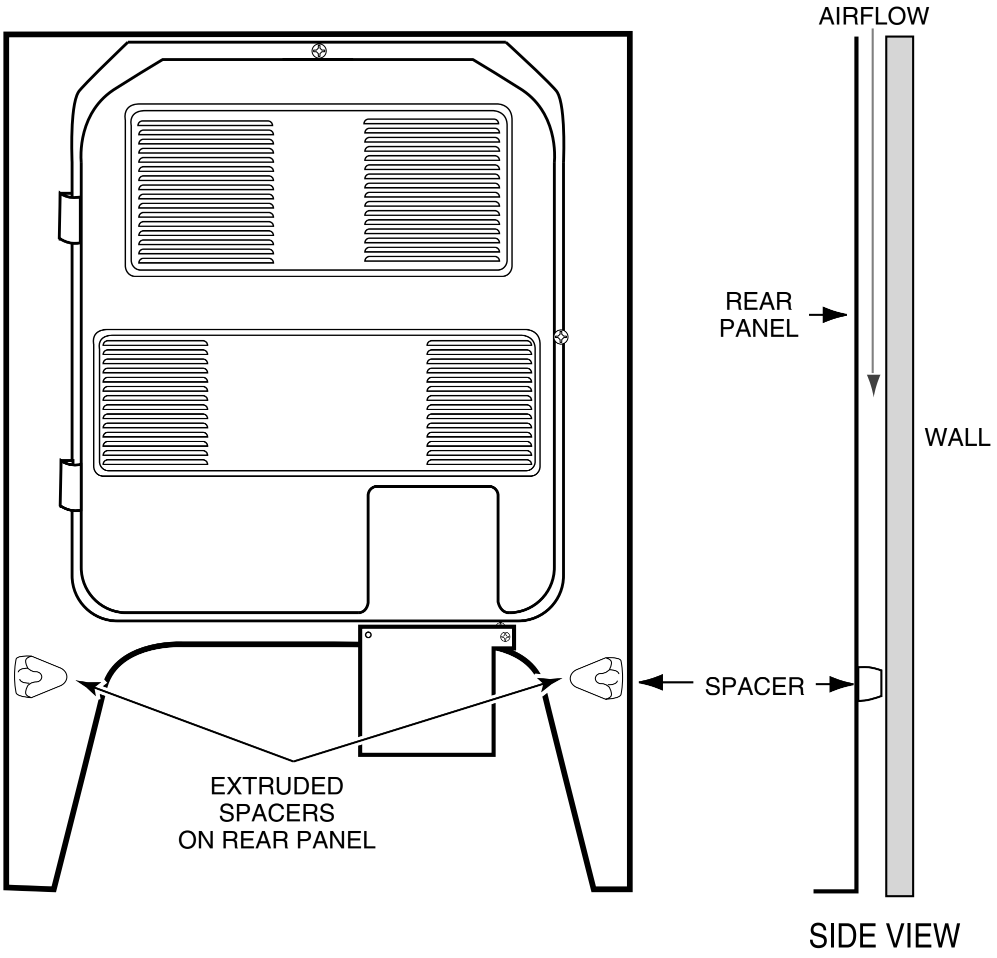
3. Slide range back so the rear foot engages in the anti-tip bracket.
4. Check to see that the range is level.
5. Reconnect the electrical supply cord.

THEORY OF OPERATION

AIR FLOW — REAR PANEL

The electric range needs sufficient air to properly cool the oven. In addition, proper air flow through the electric range also keeps the front control panel from becoming too hot while the elements are operating, and causing operational problems.

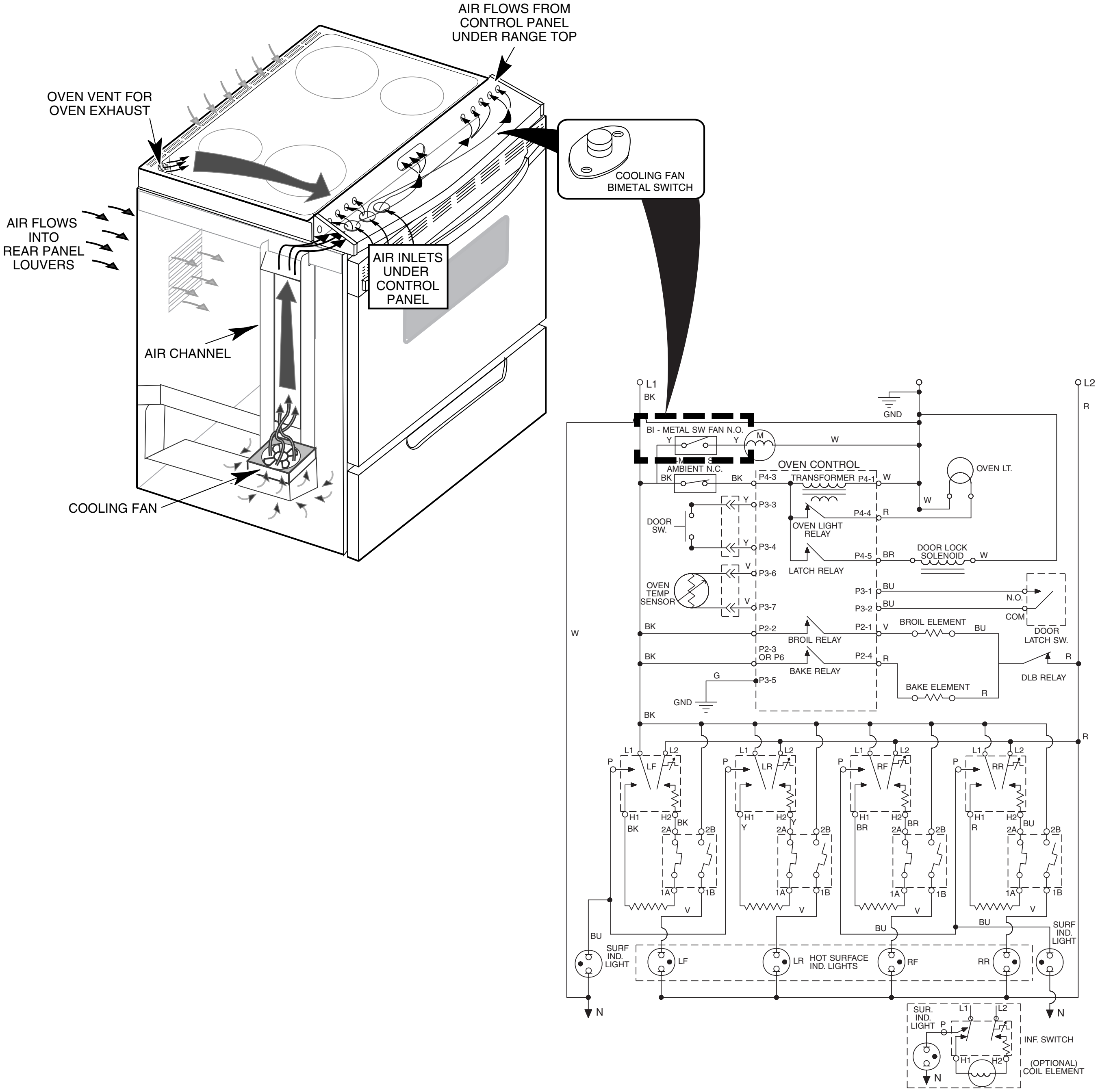
To help provide the proper air flow along the back of the range, the rear panel of the range has a spacer on each side toward the bottom. When the range is installed, these spacers should just come in contact with the surface of the wall. If they are accidentally bent in, proper spacing will be lost, and the oven will not heat properly. Also, the front control panel may become overly warm, and cause the bimetal switches to trip, shutting down the operation. If any of these problems occur, it is most likely because of air flow restrictions.



COOLING FAN AIR FLOW

The cooling fan is in series with the cooling fan bimetal switch, which is located under the right side of the control panel. When the temperature of the chassis reaches 40˚C (104˚F), the bimetal switch closes, and turns on the cooling fan.

The cooling fan draws air from inside the base of the cabinet. It forces the air up the air channel, which is located under the left side panel, to the opening at the end of the control panel. Air then flows across the chassis below the control panel, and cools it. Air enters through the series of holes in front of the range top, flows beneath it, and exits to the outside through slots in the rear panel. When the control panel chassis temperature drops below 40˚C (104˚F), the bimetal switch opens, and turns the cooling fan off.

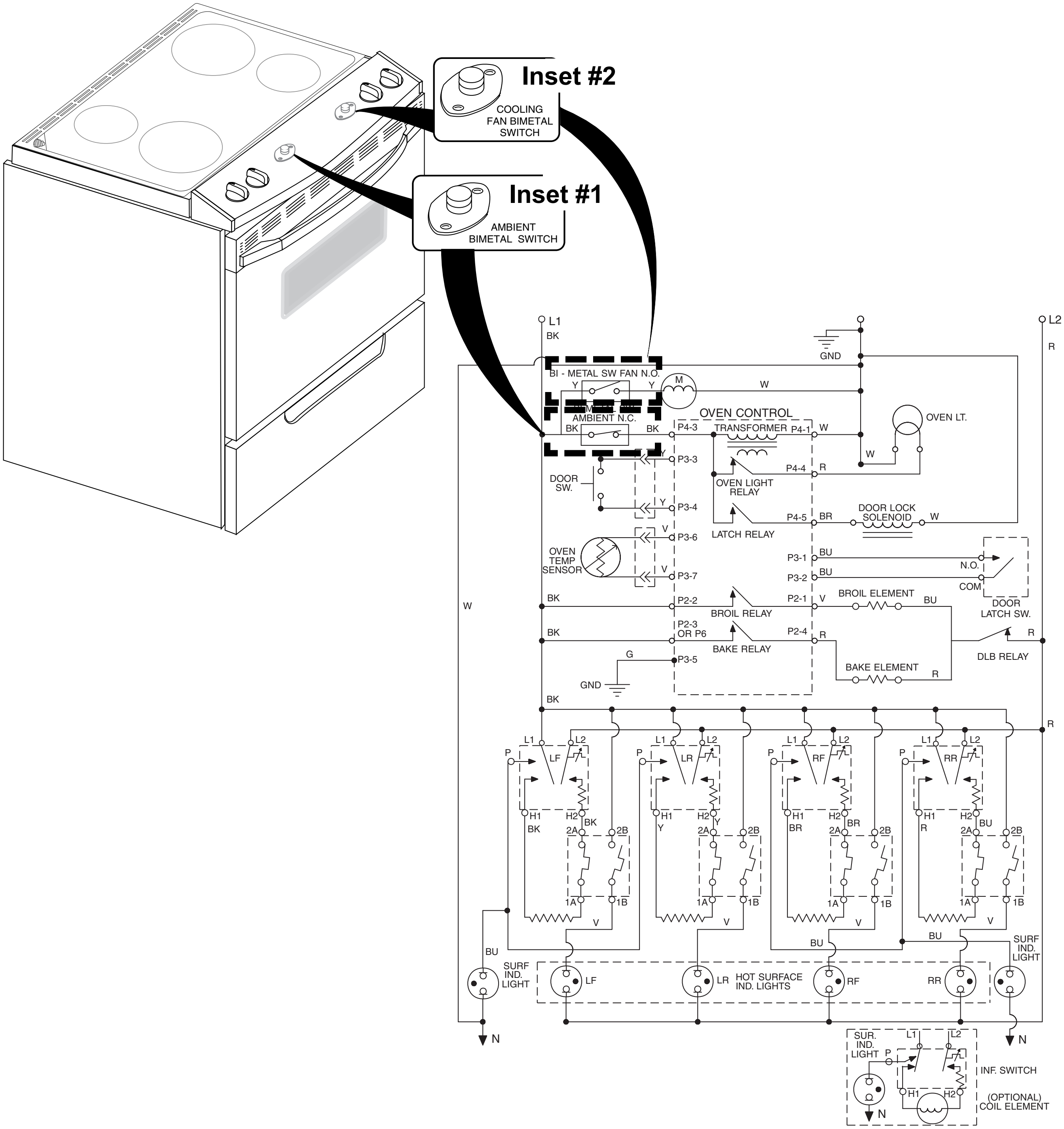


AIR FLOWS FROM CONTROL PANEL UNDER RANGE TOP
OVEN VENT FOR OVEN EXHAUST
COOLING FAN BIMETAL SWITCH
AIR FLOWS INTO REAR PANEL LOUVERS
AIR INLETS UNDER CONTROL PANEL
AIR CHANNEL
COOLING FAN
L1
BK
L2
R
GND
BI - METAL SW FAN N.O.
Y
M
W
AMBIENT N.C.
OVEN CONTROL
TRANSFORMER
P4-3
P4-1
OVEN LT.
P3-3
P4-4
DOOR SW.
OVEN LIGHT RELAY
P3-4
P4-5
BR
DOOR LOCK SOLENOID
P3-6
LATCH RELAY
OVEN TEMP SENSOR
P3-1
P3-2
BU
N.O.
COM
P3-7
P2-2
P2-1
BROIL ELEMENT
V
DOOR LATCH SW.
BROIL RELAY
P2-3 OR P6
P2-4
BAKE RELAY
DLB RELAY
G
P3-5
BAKE ELEMENT
GND
LF
LR
RF
RR
P
H1
H2
2A
2B
1A
1B
SURF IND. LIGHT
HOT SURFACE IND. LIGHTS
N
SUR. IND. LIGHT
INF. SWITCH
(OPTIONAL) COIL ELEMENT

THE BIMETAL SWITCHES

There are two bimetal switches on the electric range. The switches operate as follows:

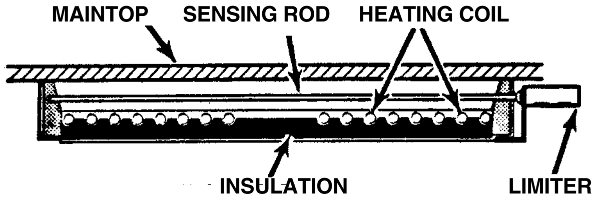
- *Ambient Bimetal Switch (N.C.) (Inset #1)* —This switch is located under the left side of the control console. It opens the L1 circuit to the electronic control board if the console temperature reaches 96˚C/205˚F.
- *Cooling Fan Bimetal Switch (N.O.) (Inset #2)* —This switch is located under the right side of the control console. It turns the cooling fan on if the console temperature reaches 70˚C/158˚F.

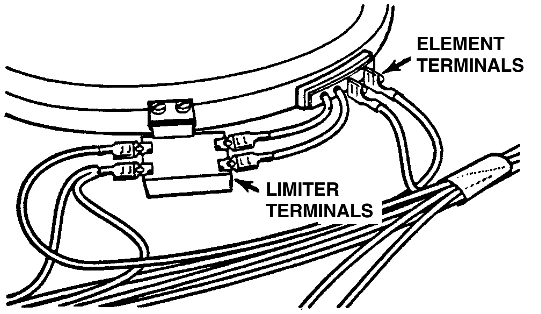


Inset #2
COOLING FAN BIMETAL SWITCH
Inset #1
AMBIENT BIMETAL SWITCH
L1
BK
L2
R
GND
BI - METAL SW FAN N.O.
Y
M
W
AMBIENT N.C.
OVEN CONTROL
P4-3
TRANSFORMER
P4-1
OVEN LT.
P3-3
P4-4
OVEN LIGHT RELAY
DOOR SW.
P3-4
P4-5
BR
DOOR LOCK SOLENOID
LATCH RELAY
V
P3-6
OVEN TEMP SENSOR
P3-7
P3-1
BU
P3-2
N.O.
COM
DOOR LATCH SW.
P2-2
P2-1
BROIL ELEMENT
BROIL RELAY
P2-3 OR P6
P2-4
BAKE RELAY
DLB RELAY
G
P3-5
BAKE ELEMENT
LF
LR
RF
RR
P
H1
H2
2A
2B
1A
1B
SURF IND. LIGHT
HOT SURFACE IND. LIGHTS
N
SUR. IND. LIGHT
INF. SWITCH
(OPTIONAL) COIL ELEMENT

THE SURFACE ELEMENT LIMITER

The surface element limiter is a safety device that is mounted in the surface element circuit .

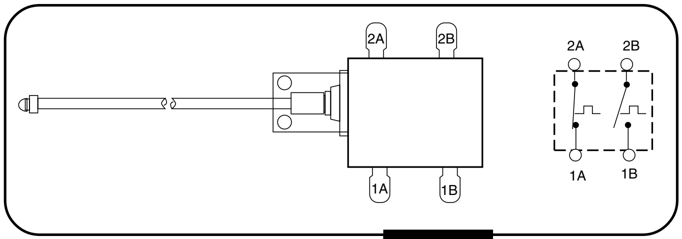

MAINTOP
SENSING ROD
HEATING COIL
INSULATION
LIMITER

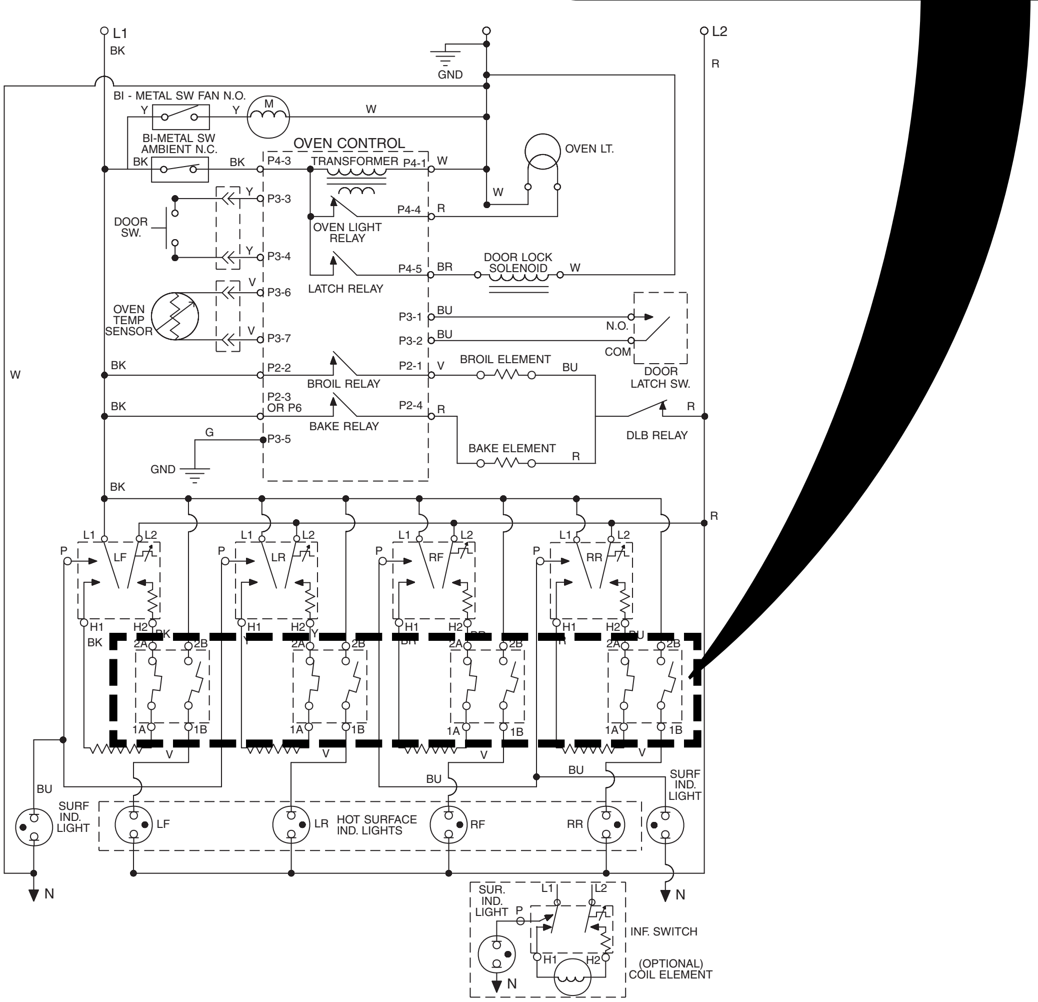

ELEMENT TERMINALS
LIMITER TERMINALS

The limiter monitors the temperature of the cooktop glass in two ways:

a) Circuit 1A to 2A, which is a normally-closed (N.C.) switch, opens at 1025˚F and protects the ceran glass from heat damage.

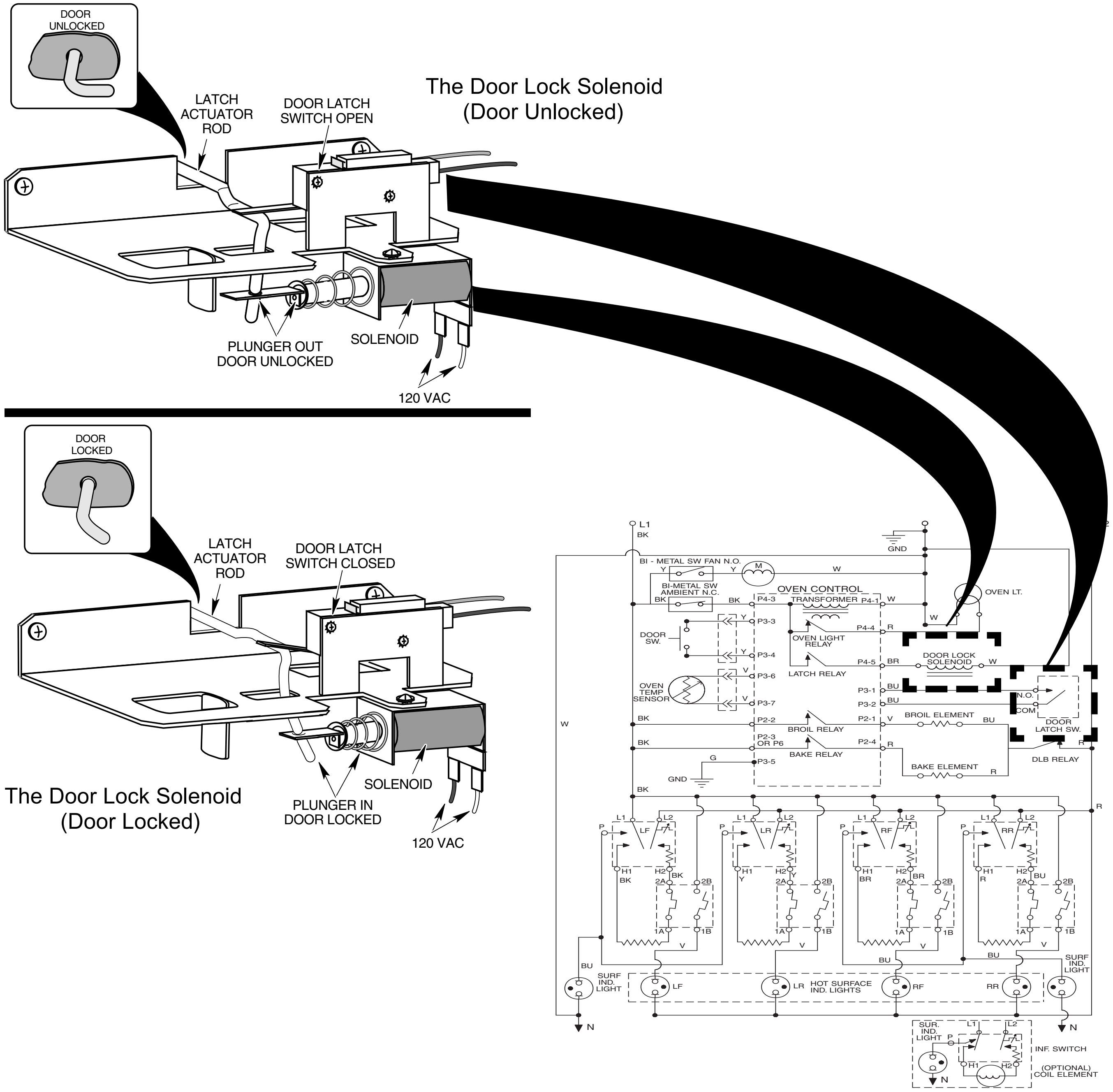
b) Circuit 1B to 2B, which is a normally-open switch (N.O.) switch, closes and turns on the hot surface indicator lights if the temperature of the cooktop is greater than 150˚F. This switch will remain closed until the ceran glass is warm enough to touch.


2A
2B
1A
1B
2A
2B
1A
1B


L1
BK
GND
L2
R
BI - METAL SW FAN N.O.
Y
Y
M
W
BI-METAL SW AMBIENT N.C.
BK
BK
OVEN CONTROL
P4-3
TRANSFORMER
P4-1
W
OVEN LT.
W
P3-3
Y
P4-4
R
DOOR SW.
OVEN LIGHT RELAY
Y
P3-4
P4-5
BR
DOOR LOCK SOLENOID
W
V
P3-6
LATCH RELAY
OVEN TEMP SENSOR
P3-1
BU
N.O.
V
P3-7
P3-2
BU
COM
W
BK
P2-2
P2-1
V
BROIL ELEMENT
BU
BROIL RELAY
DOOR LATCH SW.
BK
P2-3 OR P6
P2-4
R
R
BAKE RELAY
DLB RELAY
G
P3-5
BAKE ELEMENT
R
GND
BK
R
L1
L2
P
LF
LR
RF
RR
H1
H2
BK
BK
Y
Y
BR
BR
R
BU
2A
2B
1A
1B
V
BU
BU
BU
SURF IND. LIGHT
SURF IND. LIGHT
LF
LR
HOT SURFACE IND. LIGHTS
RF
RR
N
N
SUR. IND. LIGHT
P
L1
L2
INF. SWITCH
H1
H2
N
(OPTIONAL) COIL ELEMENT

THE DOOR LOCK SOLENOID & DOOR LATCH SWITCH

The door lock solenoid operates on a 120-volt pulse from the electronic control board. When the door is in the unlocked position, the plunger is extended. When the door latch switch is open, the control senses that the door is unlocked. When the door latch switch closes, the control senses that the door is locked. The door latch switch, mounted on the solenoid bracket, is in the N.O. (normally-open) position. During the self-clean cycle, the control board sends a 120-volt pulse to the solenoid windings, which pulls the plunger in, and moves the latch actuator rod to lock the oven door. The movement of the rod also actuates the door latch switch and closes it. When the self-clean cycle is over, the control board sends a 120-volt pulse to the solenoid, the plunger is pushed out, the latch actuator rod releases the door, and the door latch switch opens.



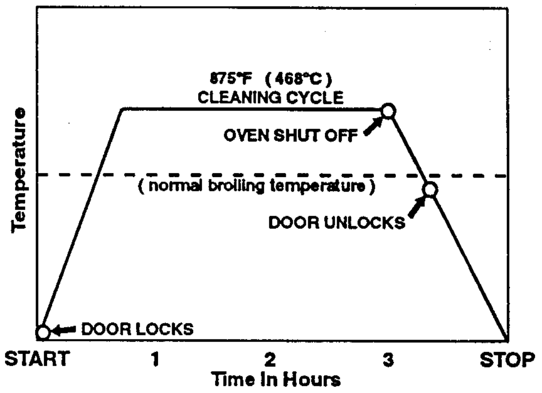
The Door Lock Solenoid (Door Unlocked)

The Door Lock Solenoid (Door Locked)

DOOR UNLOCKED
LATCH ACTUATOR ROD
DOOR LATCH SWITCH OPEN
PLUNGER OUT DOOR UNLOCKED
SOLENOID
120 VAC
DOOR LOCKED
LATCH ACTUATOR ROD
DOOR LATCH SWITCH CLOSED
PLUNGER IN DOOR LOCKED
SOLENOID
120 VAC
L1
BK
GND
BI - METAL SW FAN N.O.
M
BI-METAL SW AMBIENT N.C.
OVEN CONTROL
TRANSFORMER
P4-3
P4-1
OVEN LT.
DOOR SW.
P3-3
P3-4
OVEN LIGHT RELAY
P4-4
P4-5
DOOR LOCK SOLENOID
LATCH RELAY
OVEN TEMP SENSOR
P3-6
P3-7
P3-1
P3-2
N.O.
COM
DOOR LATCH SW.
P2-2
P2-1
BROIL RELAY
BROIL ELEMENT
P2-3 OR P6
P2-4
BAKE RELAY
DLB RELAY
P3-5
BAKE ELEMENT
GND
LF
LR
RF
RR
H1
H2
2A
2B
1A
1B
SURF IND. LIGHT
HOT SURFACE IND. LIGHTS
N
SUR. IND. LIGHT
INF. SWITCH
(OPTIONAL) COIL ELEMENT

HOW THE SELF-CLEAN CYCLE WORKS

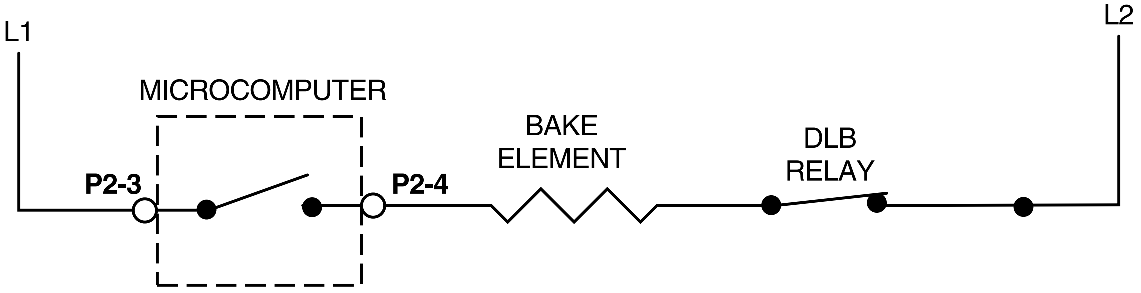
The Self-Clean cycle uses high heat to burn away soil and grease from inside the oven. During this cycle, the oven will get much hotter than it does under normal baking and broiling conditions (see the following chart).



The oven is preset for a 3-1/2 hour Self-Clean cycle. However, you can adjust this cycle time to between 2-1/2 and 4-1/2 hours. The chart shows a normal 3-1/2 hour Self-Clean cycle. Note that although the heating turns off after 3 hours, the door will remain locked for an additional 1/2 hour so the oven can cool sufficiently.

During the Self-Clean cycle, the bake element is on all the time. If the door latch switch is not activated during the clean operation, the cycle is terminated and the display will show "close door."

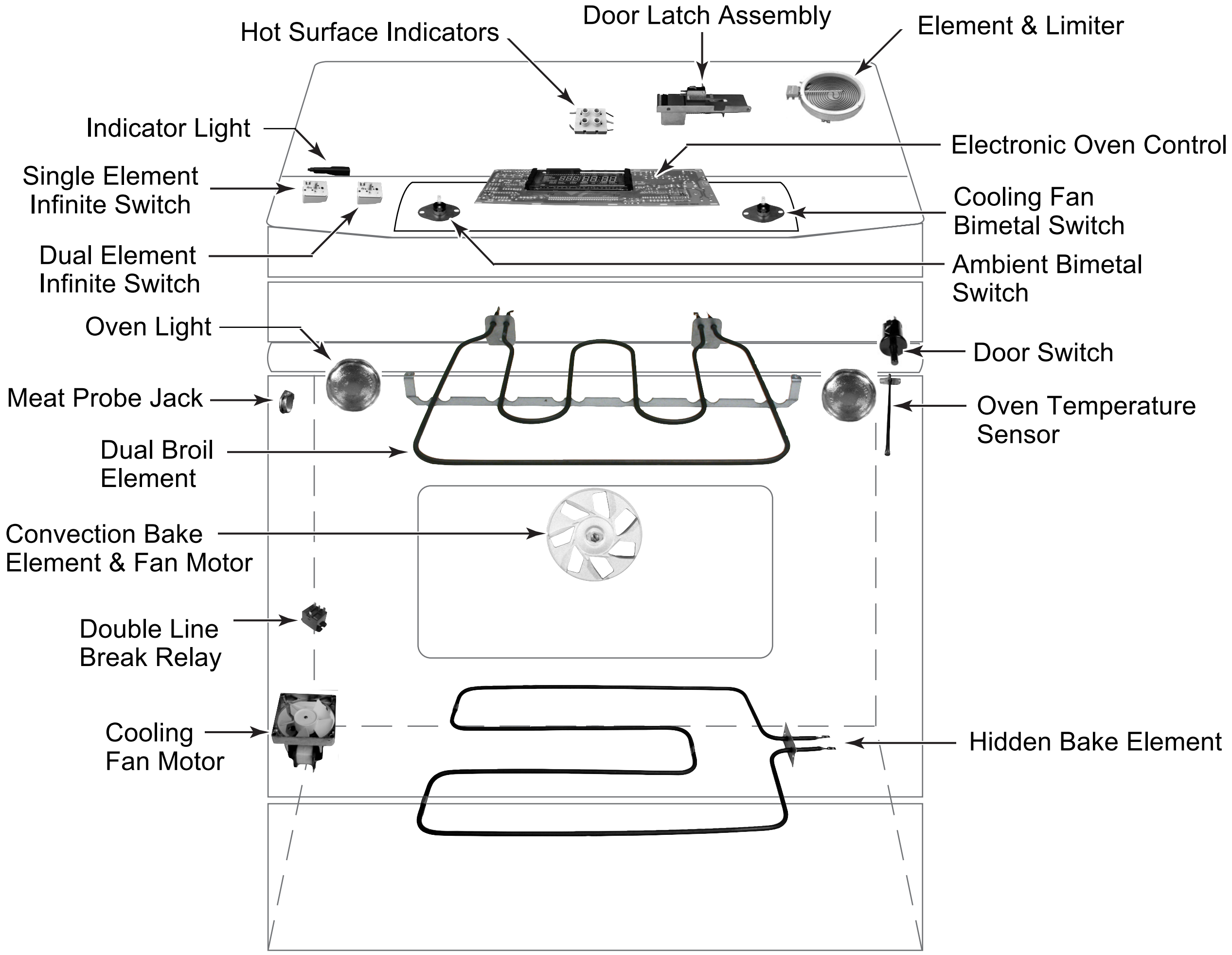
AFTER 30 MINUTES OF CLEAN



COMPONENT ACCESS

This section instructs you on how to service each component inside the range. The range components and their locations are shown below.

COMPONENT LOCATIONS


Hot Surface Indicators
Door Latch Assembly
Element & Limiter
Indicator Light
Electronic Oven Control
Single Element Infinite Switch
Cooling Fan Bimetal Switch
Dual Element Infinite Switch
Ambient Bimetal Switch
Oven Light
Door Switch
Meat Probe Jack
Oven Temperature Sensor
Dual Broil Element
Convection Bake Element & Fan Motor
Double Line Break Relay
Cooling Fan Motor
Hidden Bake Element

REMOVING THE CONTROL PANEL, AN INFINITE SWITCH & BIMETAL SWITCH

⚠WARNING

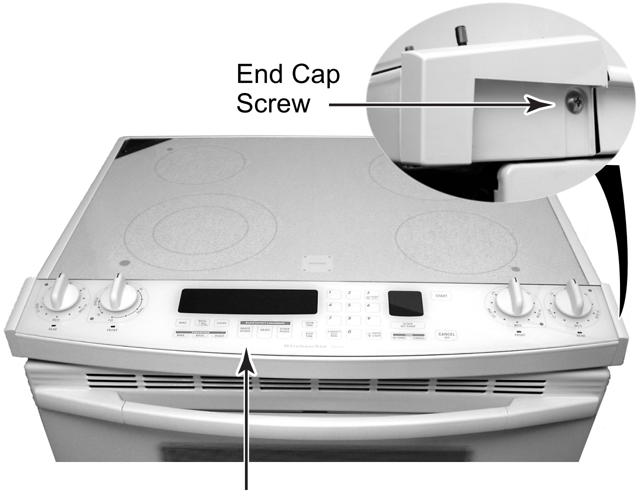
Electrical Shock Hazard

Disconnect power before servicing.

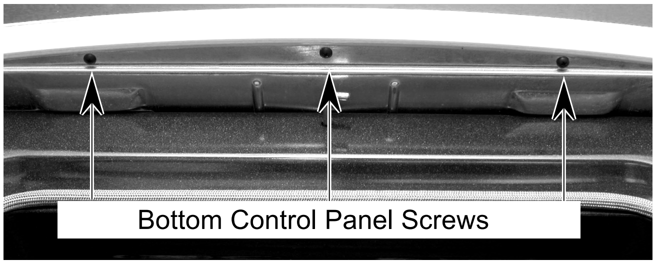
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

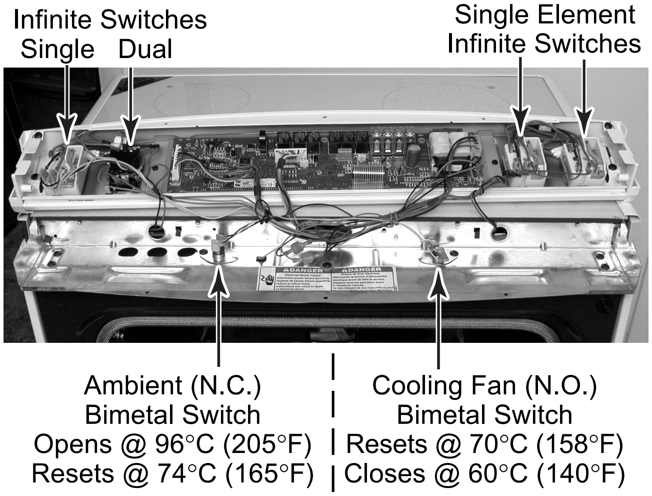
1. Unplug range or disconnect power.
2. Pull the range forward far enough to access the end cap screws.
3. **To remove the control panel:**
   a) Remove the screw from each end cap.


End Cap Screw
Control Panel

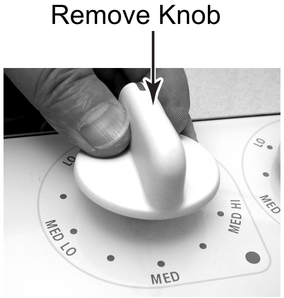
   b) Open the oven door and remove the three screws from the bottom of the control panel (see the photo at the top of the right column).


Bottom Control Panel Screws

   c) Lift the front of the control panel, pull it forward, and slide the front edge of the cooktop glass out of the slot in the front of the panel.
   d) Rotate the control panel up and over so the bottom side faces up.


Infinite Switches
Single Dual
Single Element Infinite Switches
Ambient (N.C.) Bimetal Switch Opens @ 96°C (205°F) Resets @ 74°C (165°F)
Cooling Fan (N.O.) Bimetal Switch Resets @ 70°C (158°F) Closes @ 60°C (140°F)

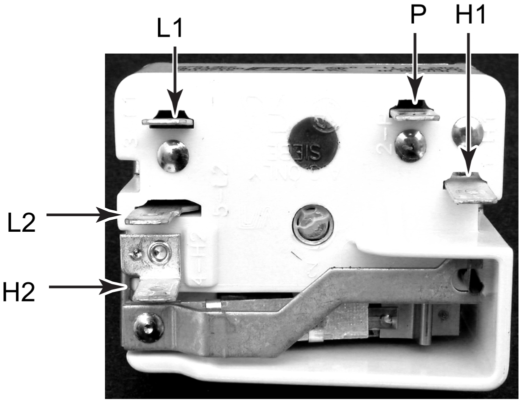
4. **To remove an infinite switch:**
   a) Pull the knob off the switch you wish to service and remove the nut and fiber flat washer.


Remove Knob

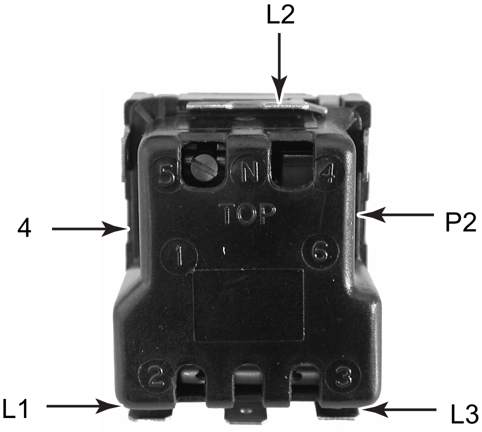
Remove Nut & Fiber Flat Washer

   b) Remove the wires from the infinite switch terminals and remove the switch. NOTE: The terminal callouts are shown on the next page.

(3) Single Infinite Switch

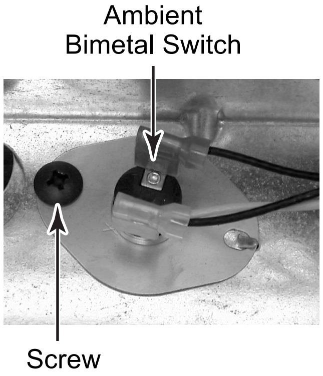


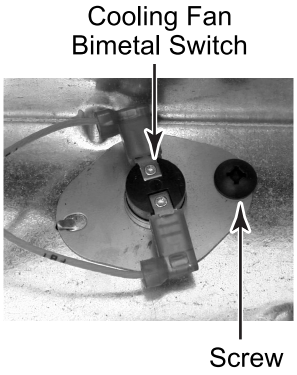
(1) Dual Infinite Switch



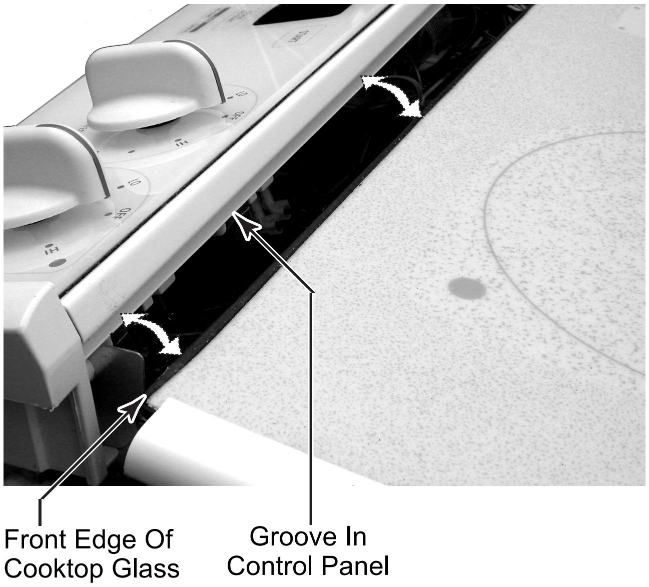
NOTE: Refer to the Tech Sheet Wiring Diagram that is supplied with the unit to determine the wiring for the infinite switch you are servicing.

5. **To remove a bimetal switch:**
   a) Remove the wires from the terminals.
   b) Remove the mounting screw.


Ambient
Bimetal Switch
Screw


Cooling Fan
Bimetal Switch
Screw

REASSEMBLY NOTE: When reinstalling the control panel, insert the groove in the front of the panel over the front edge of the cooktop glass, and lower it onto the front of the range. Be careful not to pinch any of the wires between the front edge of the control panel and the chassis.


Front Edge Of
Cooktop Glass
Groove In
Control Panel

REMOVING THE ELECTRONIC OVEN CONTROL AND AN INDICATOR LIGHT

⚠WARNING

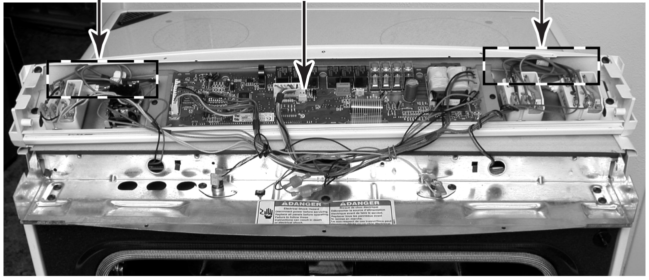
Electrical Shock Hazard

Disconnect power before servicing.

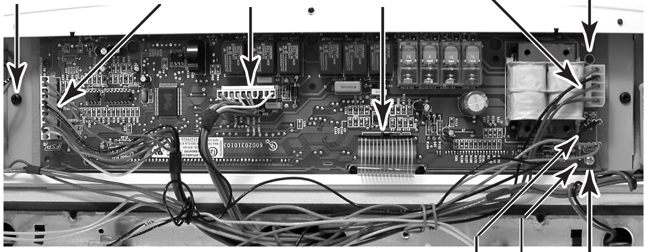
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

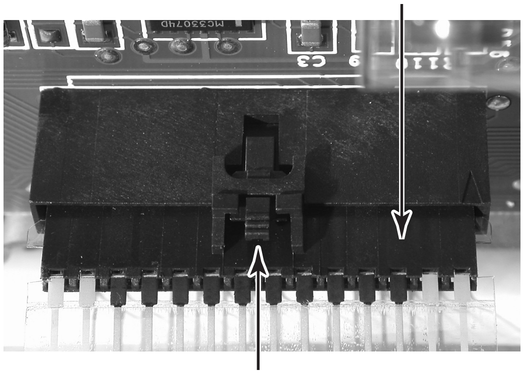
1. Unplug range or disconnect power.
2. Remove the control panel from its subchassis, (see page 4-2 for the procedure), and rotate it forward onto the cooktop glass.


(2) Indicator Lights
Electronic Oven Control
(3) Indicator Lights

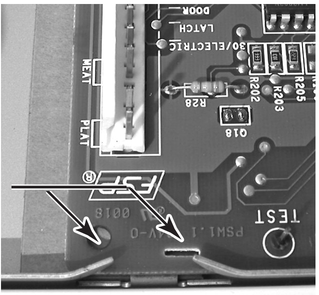
3. **To remove the electronic oven control:**
   a) Disconnect the wire connectors at P1, J1, P2, P3, and P4.


Screw
P1
J1
P9
P2
Screw
P4
P3
Screw

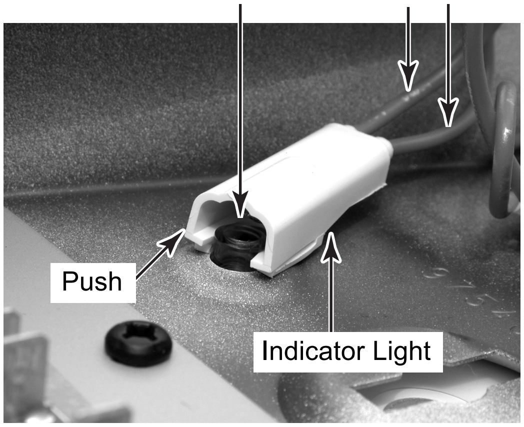
   b) Press down on the ribbon cable release arm, and disconnect the ribbon cable from the connector at P9.


Ribbon Cable Connector
Ribbon Cable Release

   c) Remove the screws from the board.
   d) Straighten the bracket tabs at the top and bottom of the board, and remove the board from the bracket.



4. **To remove an indicator light:**
   a) Push on the body and slide it off the shoulder of the lens.
   b) Disconnect the two indicator wires.


Lens
Wires
Push
Indicator Light

REMOVING AN ELEMENT & LIMITER AND THE HOT SURFACE INDICATOR ASSEMBLY

⚠WARNING

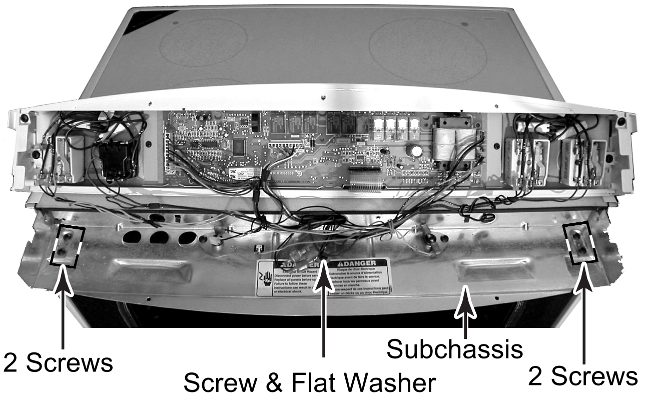
Electrical Shock Hazard

Disconnect power before servicing.

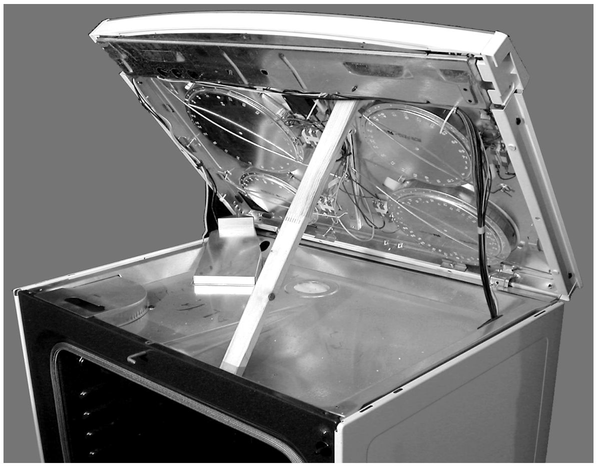
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

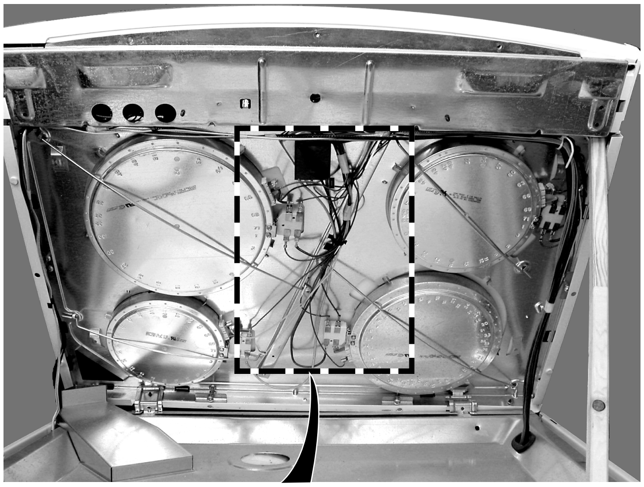
1. Unplug range or disconnect power.
2. Remove the control panel from its subchassis, (see page 4-2 for the procedure), and rotate it forward onto the cooktop glass.
3. Remove the five screws and flat washer from the control panel subchassis.

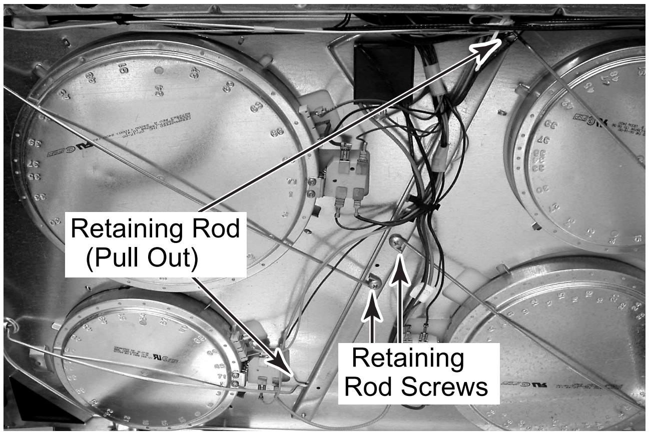


4. Move the control panel back into place over the chassis, then lift the front of the cooktop assembly, and prop it up with a piece of board so that you can access the components (see the photo at the top of the next column). **CAUTION:** Be careful that the cooktop does not accidentally fall.



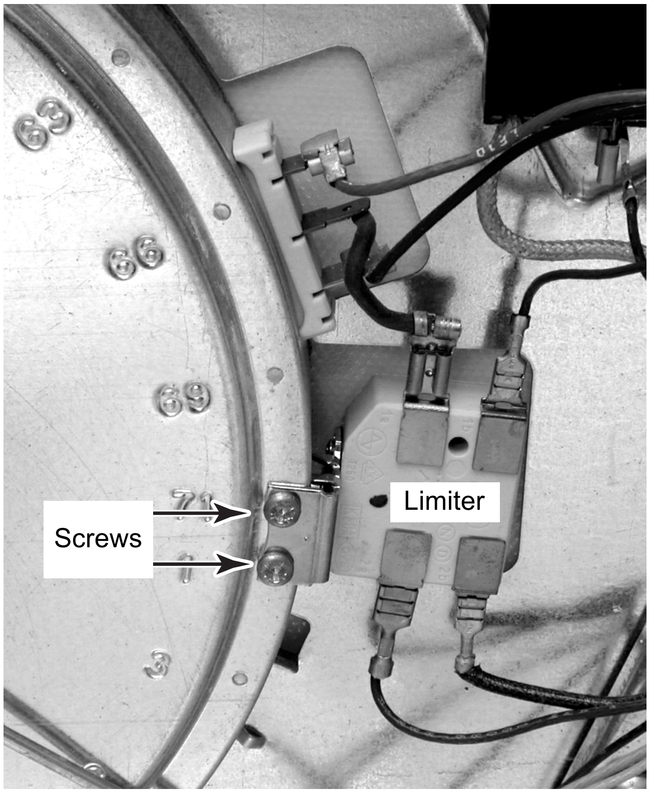
5. **To remove an element and limiter:**
   a) Remove the wires from the element and limiter terminals.
   b) Remove the screw, or pull the end of the retaining rod out of the bracket, and remove the element and limiter from the bottom of the cooktop.

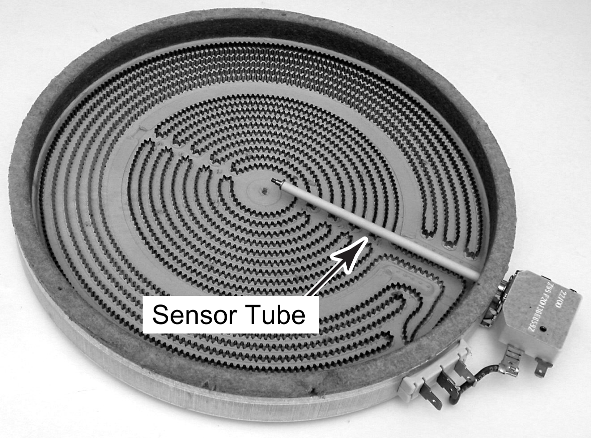




Continued on the next page.

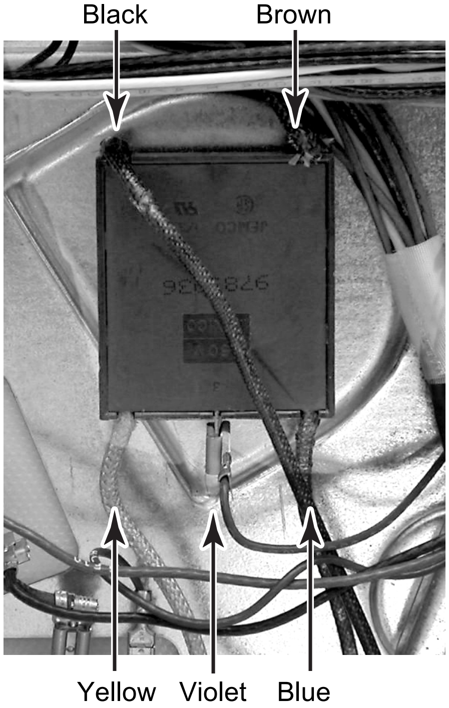
c) Lay the element and limiter on a work surface. Remove the screws from the limiter and remove it from the element. NOTE: Be careful when you remove the limiter that you do not break the sensor tube (see below).


Limiter
Screws

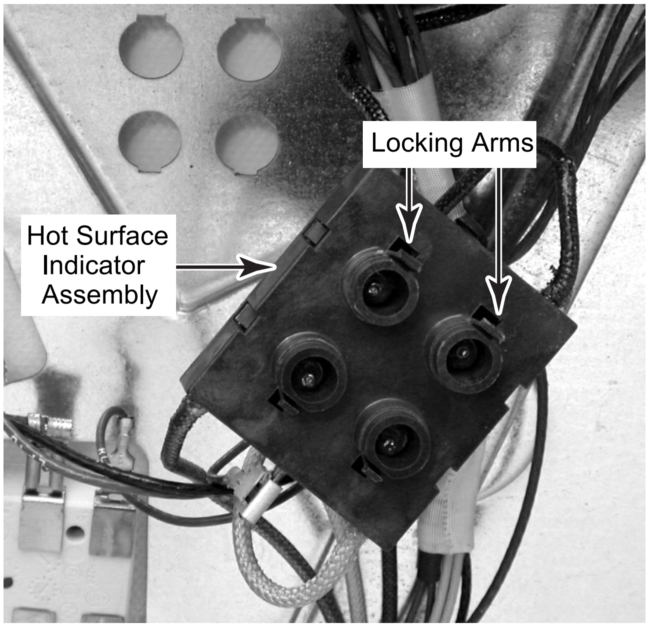

Sensor Tube

6. **To remove the hot surface indicator assembly:**

   a) Disconnect the hot surface indicator wires.


Black
Brown
Yellow
Violet
Blue

   b) Grasp the hot surface indicator assembly and push it toward the front of the unit, then pull down the rear edge, unclip the locking arms from the cooktop, and remove the assembly.


Locking Arms
Hot Surface Indicator Assembly

REMOVING THE COOKTOP GLASS

⚠WARNING

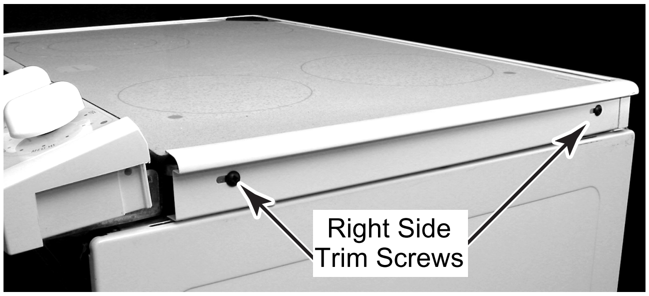
Electrical Shock Hazard

Disconnect power before servicing.

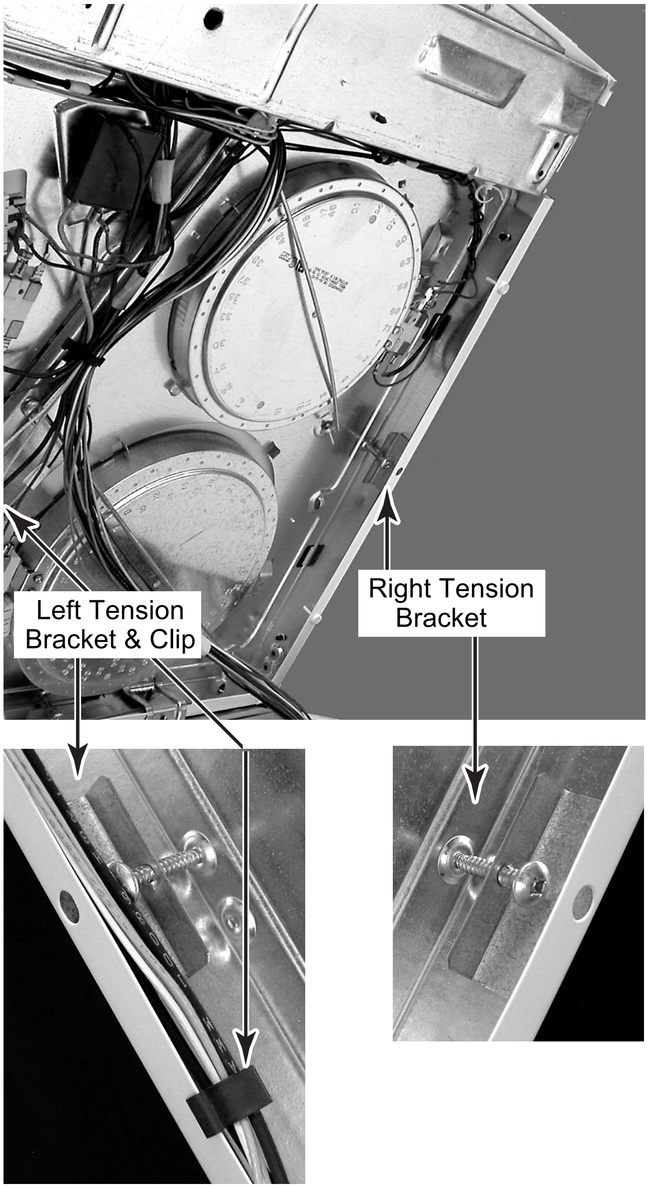
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Pull the range out of its mounting location so that you can access the side trim.
3. Remove the control panel from its subchassis, (see page 4-2 for the procedure), and set it on the subchassis.
4. Remove the two screws from the left and right side trim. Do not remove the trim at this time.

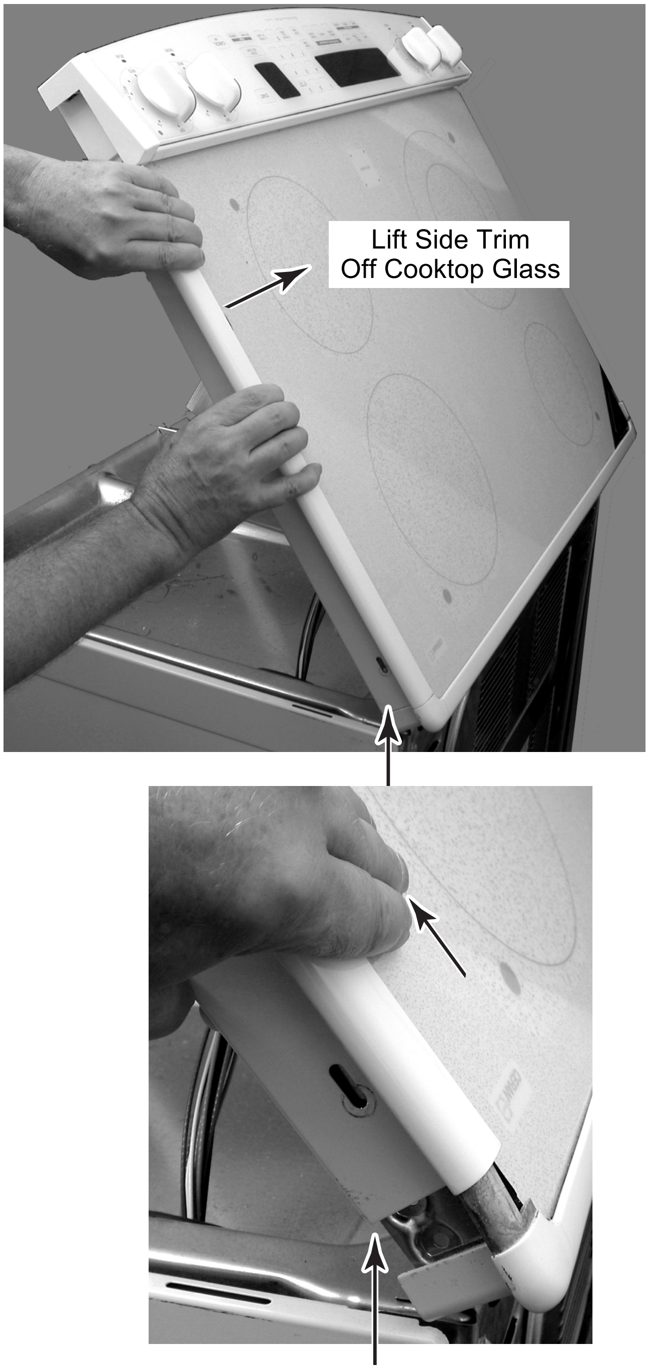


5. Raise the cooktop and prop it up (see steps 3 and 4 on page 4-5 for the procedure).
6. Loosen the left and right tension bracket screws and remove the brackets from behind the side trim.
7. Remove the wire clip from the left side trim.



Continued on the next page.

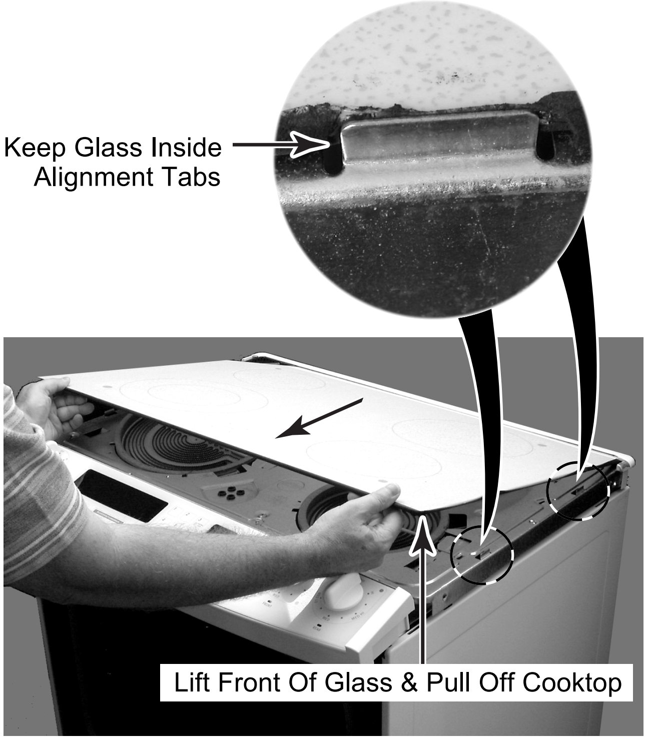
8. Pull the left and right side trim off the cooktop. To remove the trim, lift it away from the cooktop glass, and pull the back off the rear trim.


Lift Side Trim
Off Cooktop Glass
Pull Side Trim Off Rear Trim

9. Lower the cooktop.

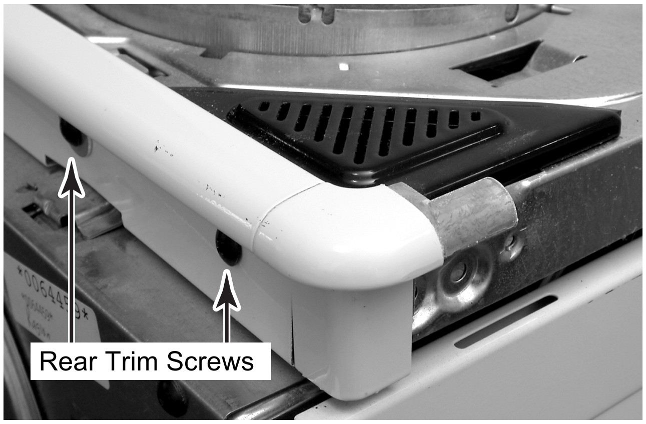
10. Lift the front of the cooktop glass, pull it forward from under the rear trim, and remove the glass from the cooktop.

    IMPORTANT: When you reinstall the cooktop glass, keep the side edges of the glass inside the four alignment tabs (two on each side). If the glass is over the tabs, it could break when you lower it.

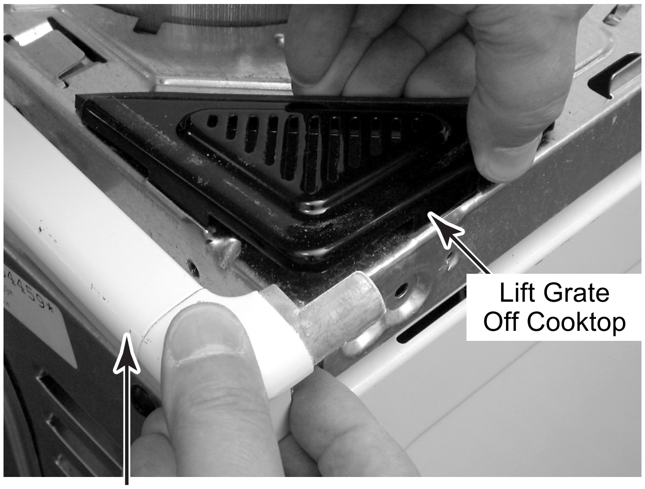

Keep Glass Inside
Alignment Tabs
Lift Front Of Glass & Pull Off Cooktop

11. To remove the vent grate from the left rear corner of the cooktop:

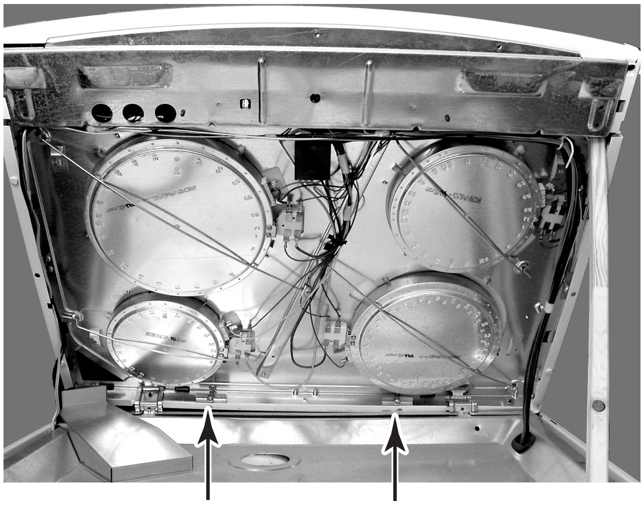
    a) Remove the two indicated rear trim screws and pull the trim away just to clear the edge of the grate.


Rear Trim Screws

b) Lift the tabs out of their slots in the chassis and remove the grate.


Lift Grate
Off Cooktop
Rear Trim

NOTE: The two rear trim tension brackets may fall out of their mounting locations in the rear trim strip when you move it. If so, be sure to reinstall them before lowering the cooktop.


Rear Trim Tension Brackets

REMOVING THE DOOR LATCH ASSEMBLY & THE DOOR SWITCH

⚠WARNING

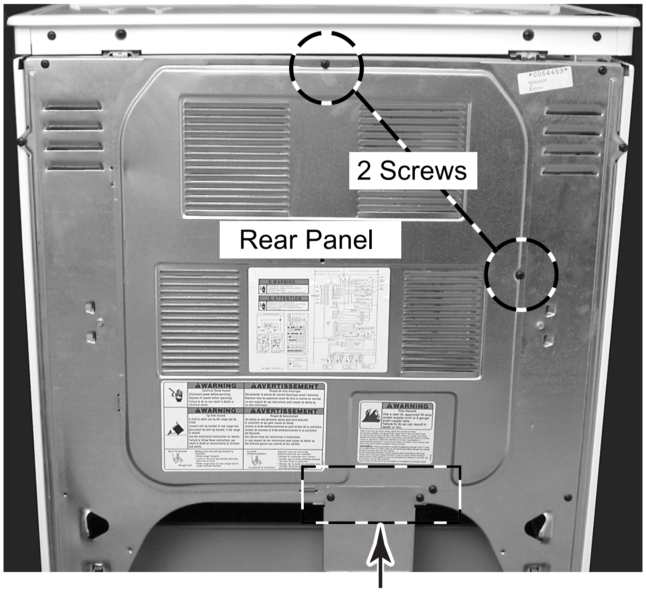
Electrical Shock Hazard

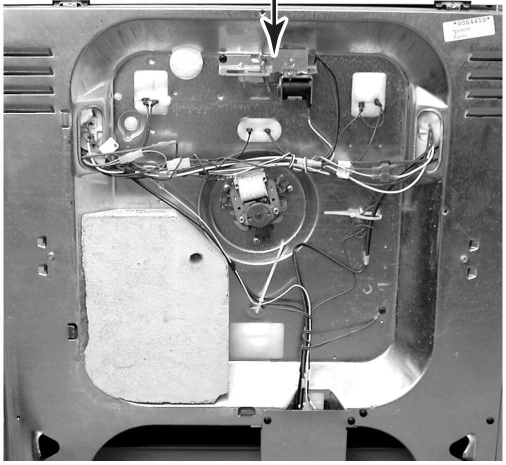
Disconnect power before servicing.

Replace all parts and panels before operating.

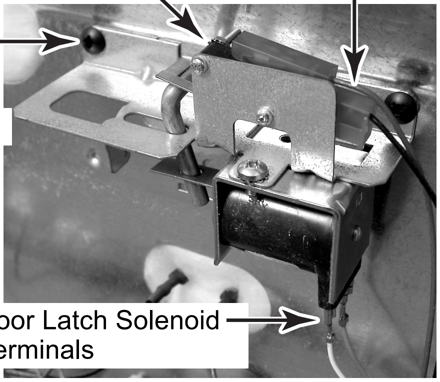
Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Pull the range away from the wall so that you can access the rear of the unit.
3. **To remove the door latch assembly:**
   a) Remove the top and side screws from the rear panel and loosen the three bottom screws, then pull the tabs out of their slots, and remove the panel.

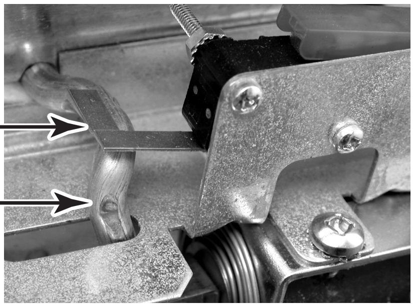

2 Screws
Rear Panel
Loosen 3 Screws


Door Latch Assembly

   b) Disconnect the 3-wire connector from the door latch switch terminals.
   c) Disconnect the wires from the door latch solenoid terminals.
   d) Remove the two screws from the door latch assembly and remove it from the unit.


Door Latch Switch
3-Wire Connector
Screw (1 of 2)
Door Latch Solenoid Terminals

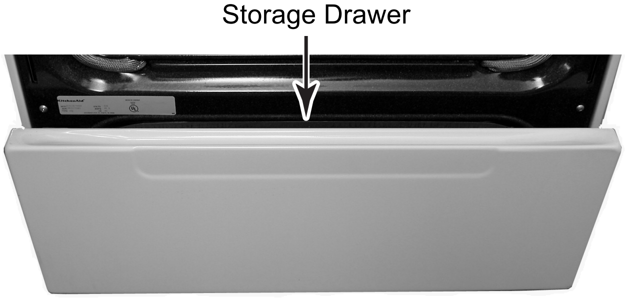
REASSEMBLY NOTE: When you reinstall the door latch assembly, make sure that the door latch switch actuator is over the latching rod, as shown.


Door Latch Switch Actuator
Latching Rod

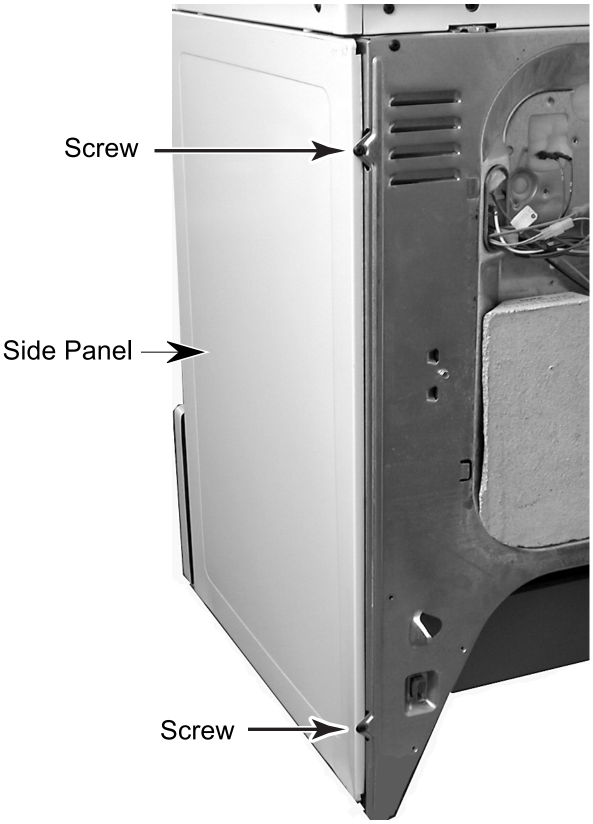
4. **To remove the door switch:**

   a) Remove the oven door and set it aside (see page 4-22 for the procedure).

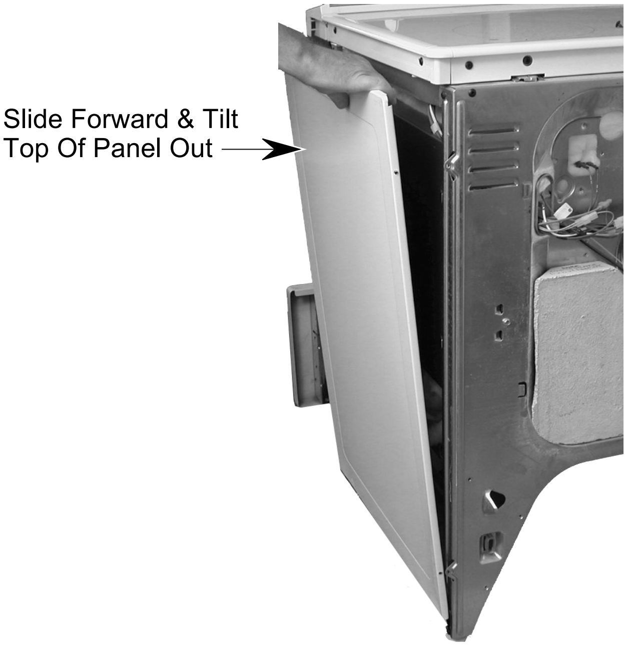
   b) Open the storage drawer several inches.


Storage Drawer

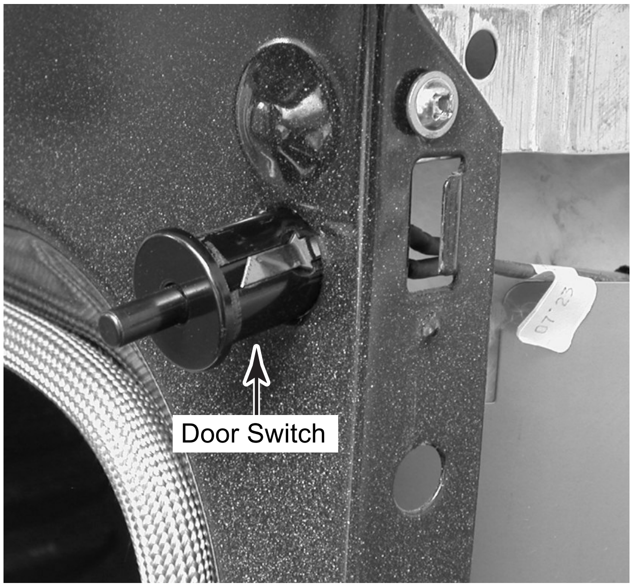
   c) Remove the two rear screws from the right side panel.


Screw
Side Panel
Screw

   d) Slide the side panel forward and unhook the top edge from the front screw, then tilt the top of the side panel out so you can access the door switch.


Slide Forward & Tilt
Top Of Panel Out

   e) Push the door switch out of the unit and disconnect the wires from the terminals.


Door Switch

REMOVING THE DUAL BROIL ELEMENT AND THE HIDDEN BAKE ELEMENT

⚠WARNING

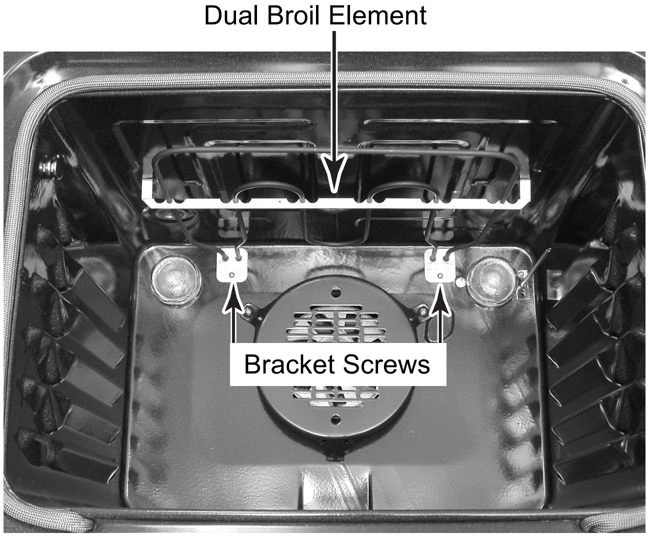
Electrical Shock Hazard

Disconnect power before servicing.

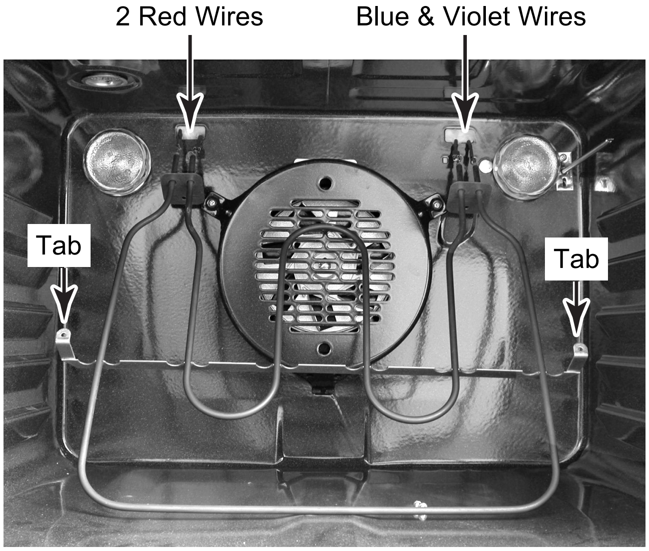
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

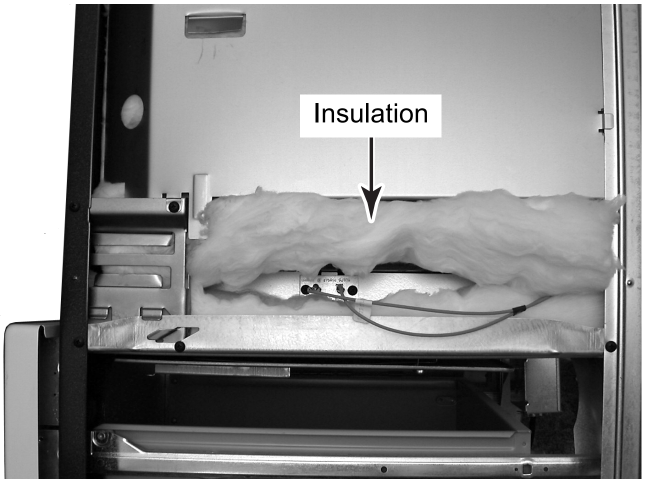
1. Unplug range or disconnect power.
2. Open the oven door and remove the racks from inside the oven.
3. **To remove the dual broil element:**
   a) Remove the two screws from the dual broil element brackets.



   b) Pull the element forward and unhook the front bracket tabs from the liner slots, then pull the element wires through the liner holes, and disconnect them from the terminals.



4. **To remove the hidden bake element:**
   a) Remove the right side panel (see page 4-19 for the procedure).
   b) Spread the insulation away from the front of the hidden bake element.

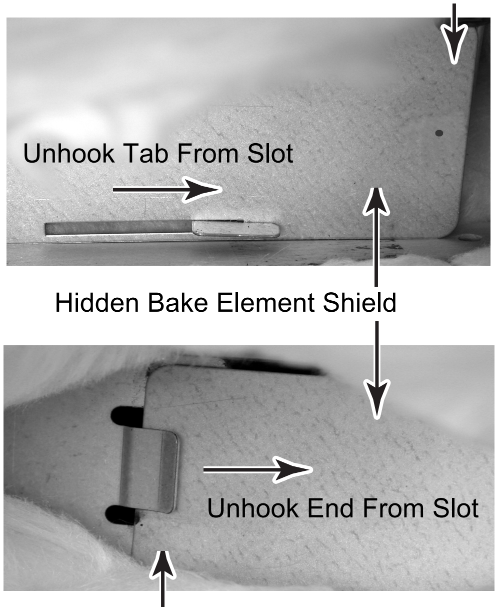


c) Disconnect the two wire connectors from the hidden bake element terminals.

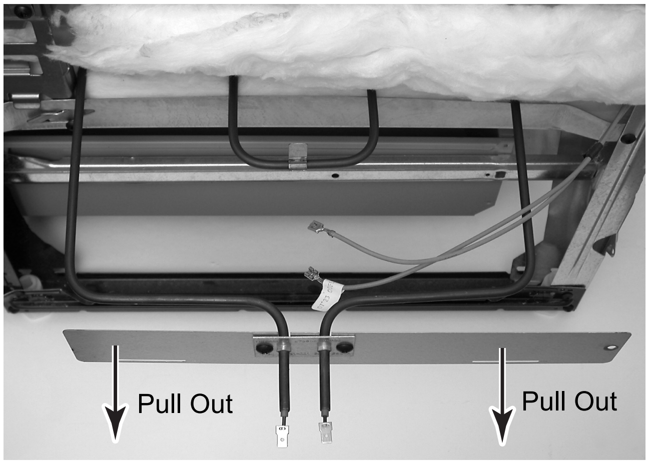
d) Remove the element shield screw from the right end of the shield.

Element Shield Screw
Element Wires

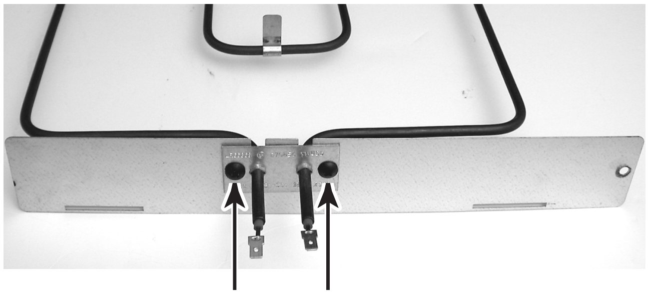
e) Pull the hidden bake element and its shield to the right and unhook the left and right tabs.


Right End
Unhook Tab From Slot
Hidden Bake Element Shield
Unhook End From Slot
Left End

f) Remove the hidden bake element from the unit, and place it on a work surface.


Pull Out
Pull Out

g) Remove the two bracket screws, and remove the shield from the element.


Element Shield Screw

REMOVING THE CONVECTION BAKE ELEMENT & FAN MOTOR

⚠WARNING

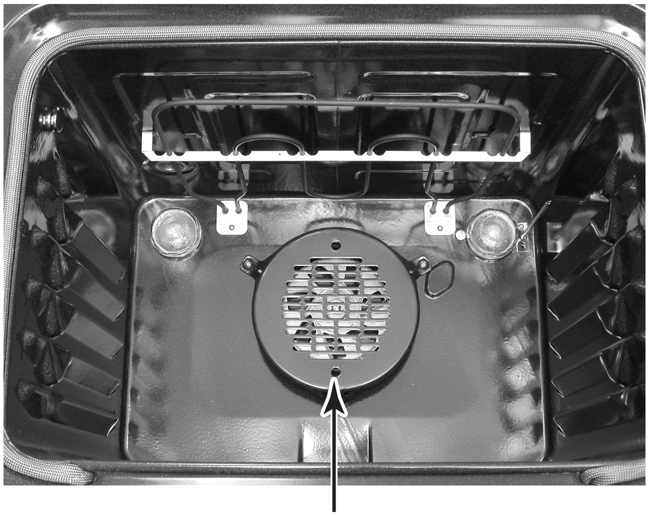
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

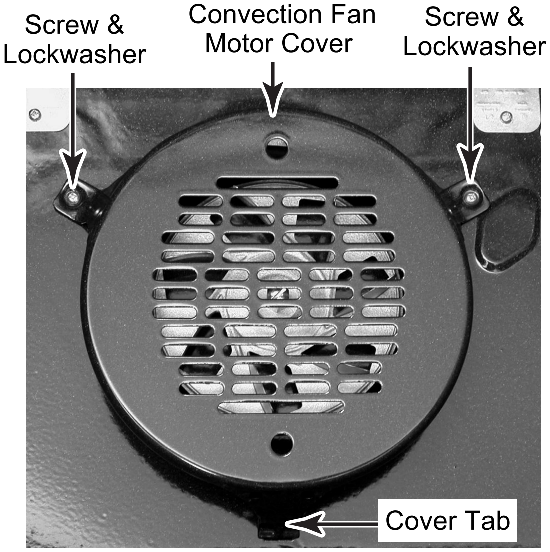
Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Open the oven door and remove the racks from inside the oven.



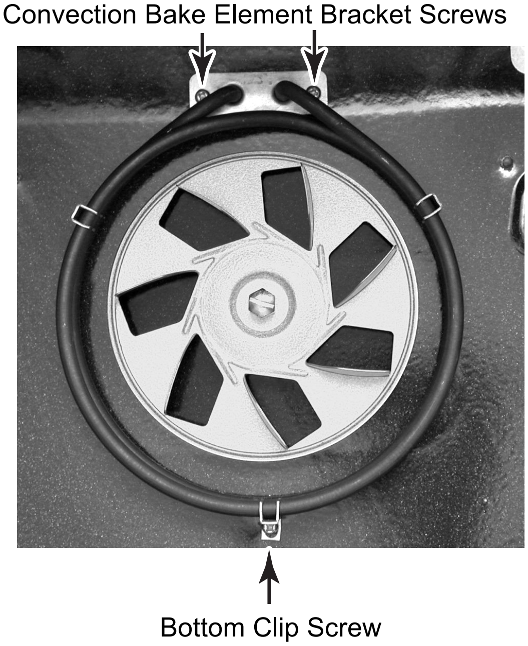
Convection Bake Element & Fan Motor

3. Remove the two screws from the convection fan motor cover, then unhook the bottom tab from the liner slot, and remove the cover.

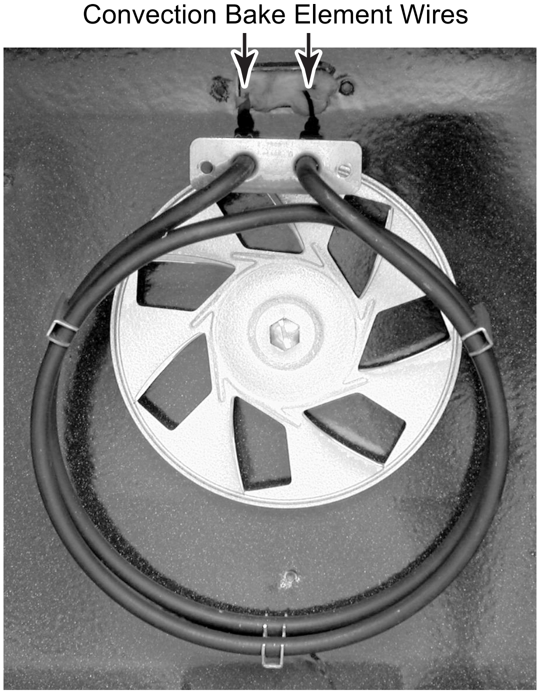

Screw & Lockwasher
Convection Fan Motor Cover
Screw & Lockwasher
Cover Tab

4. **To remove the convection bake element:**

   a) Remove the three screws from the element bracket and bottom clip.

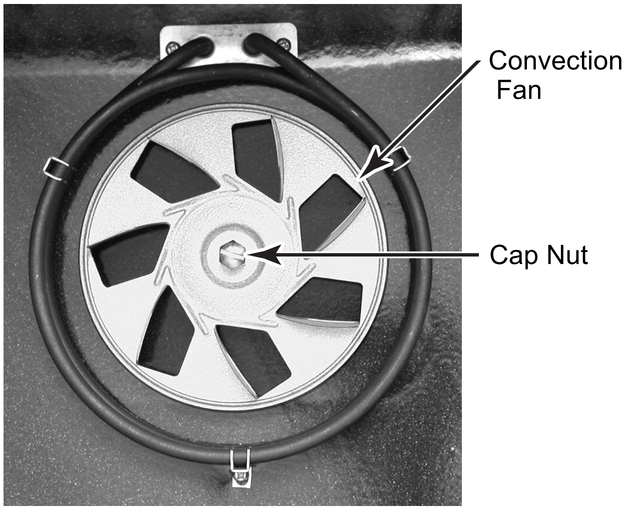

Convection Bake Element Bracket Screws
Bottom Clip Screw

b) Pull the bake element forward so the wire connectors are accessible, then disconnect the wires from the terminals. NOTE: Be careful that the wires do not pull back into the oven liner hole.


Convection Bake Element Wires

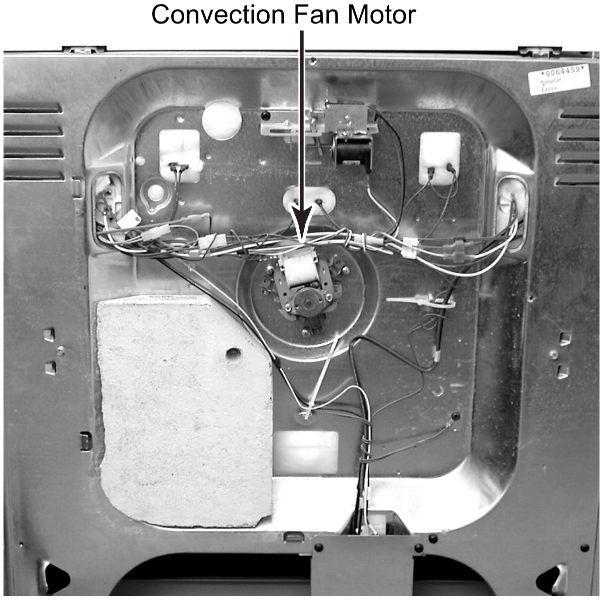
5. **To remove the convection fan motor:**

   a) Use a large screwdriver or a 13 mm socket, and remove the cap nut (clockwise) from the convection fan, then pull the fan off the convection fan motor shaft.


Convection Fan
Cap Nut

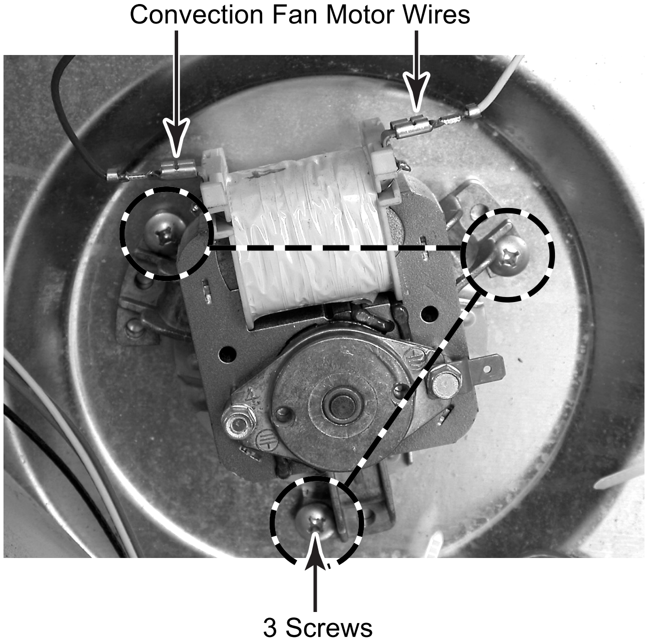
   b) Pull the range away from the wall so that you can access the rear of the unit.

   c) Remove the rear panel (see step 3a on page 4-10 for the procedure).


Convection Fan Motor

   d) Remove the three screws from the convection fan motor.

   e) Disconnect the wires from the terminals.


Convection Fan Motor Wires
3 Screws

REMOVING AN OVEN LIGHT SOCKET ASSEMBLY

⚠WARNING

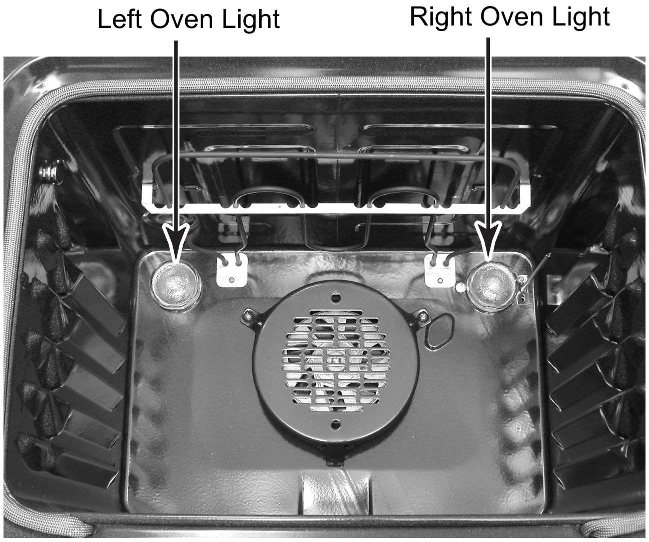
Electrical Shock Hazard

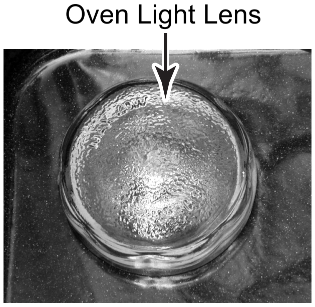
Disconnect power before servicing.

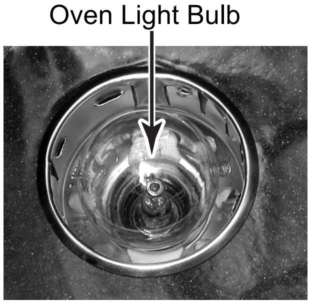
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Open the oven door and remove the racks from inside the oven.
3. Unscrew the lens and bulb from the oven light socket assembly and remove them.

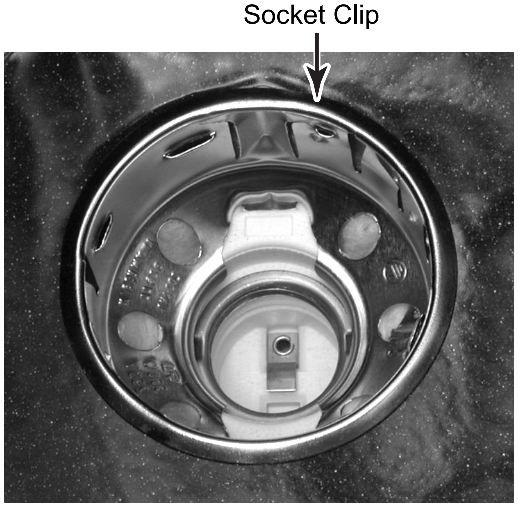




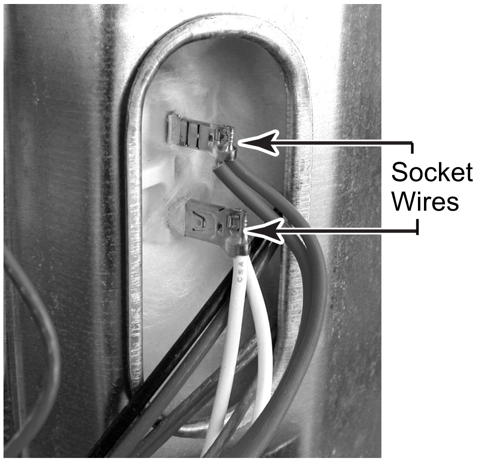


CAUTION: Be careful not to scratch or chip the oven liner paint when you remove the oven light socket in the next step.

4. Use a screwdriver and bend the clips on the oven light socket away from the edges of the liner hole, and pull the socket out of the liner. NOTE: If it is too difficult to remove the socket from the front of the oven, you will have to push the socket out from the back of the unit.



5. Disconnect the wires from the socket terminals.



(Viewed From Rear Panel)

REMOVING THE MEAT PROBE JACK

⚠WARNING

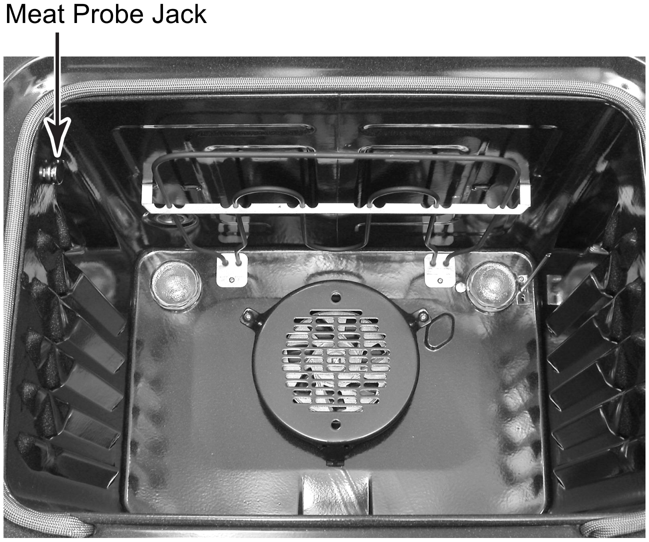
Electrical Shock Hazard

Disconnect power before servicing.

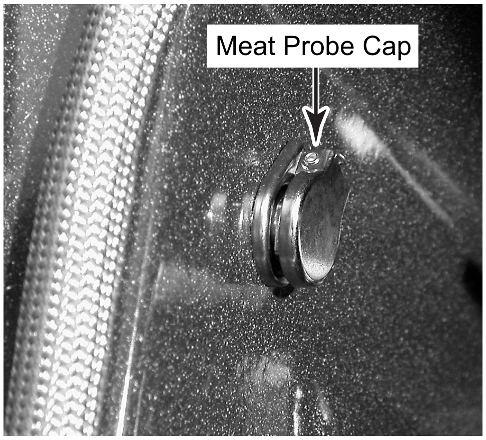
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

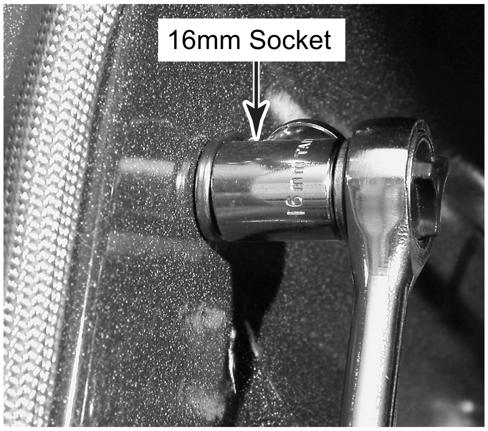
1. Unplug range or disconnect power.
2. Open the oven door and remove the racks from inside the oven.
3. Pull the range away from the wall so that you can access the left side of the unit.
4. Remove the left side panel (see page 4-19 for the procedure).


Meat Probe Jack

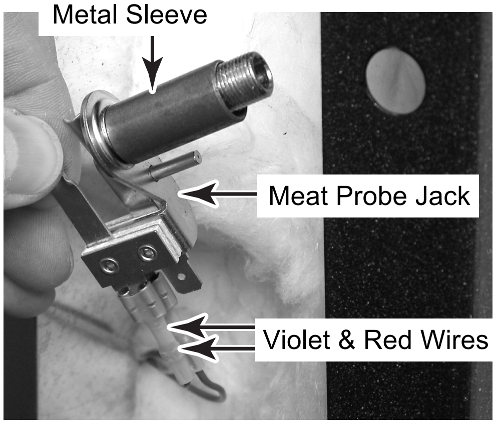
5. Lift the spring-loaded cap on the meat probe jack.


Meat Probe Cap

6. Use a 16mm socket and remove the meat probe jack nut and felt washer from the oven liner.


16mm Socket

7. Remove the metal sleeve and disconnect the wires from the meat probe jack terminals, then remove the jack from the unit.


Metal Sleeve
Meat Probe Jack
Violet & Red Wires

REMOVING THE OVEN TEMPERATURE SENSOR

⚠WARNING

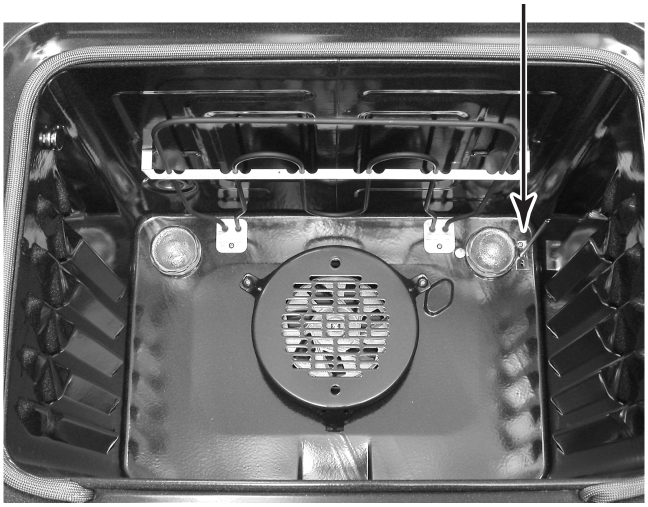
Electrical Shock Hazard

Disconnect power before servicing.

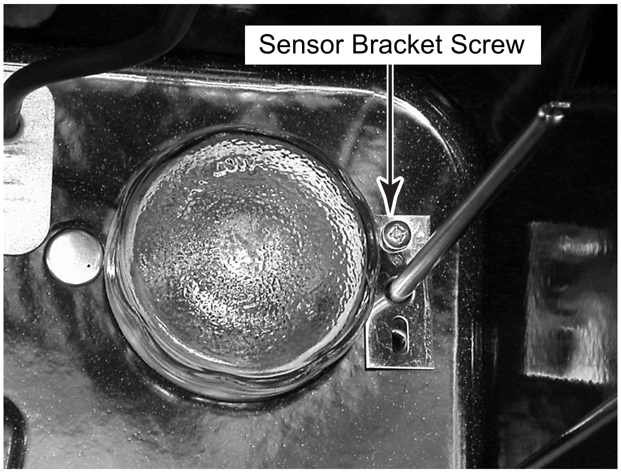
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

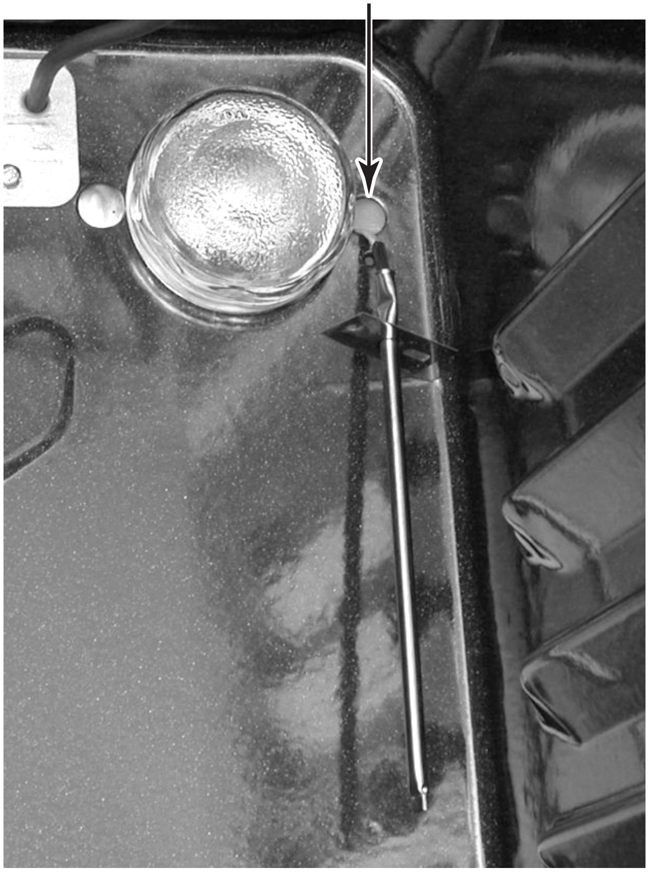
1. Unplug range or disconnect power.
2. Open the oven door and remove the racks from inside the oven.


Oven Temperature Sensor

3. Remove the screw from the temperature sensor bracket.


Sensor Bracket Screw

4. Pull the oven temperature sensor wire and connector out of the oven liner.
5. Disconnect the oven temperature sensor connector and remove the sensor.


Pull Connector Through Liner Hole

REMOVING A SIDE PANEL

⚠WARNING

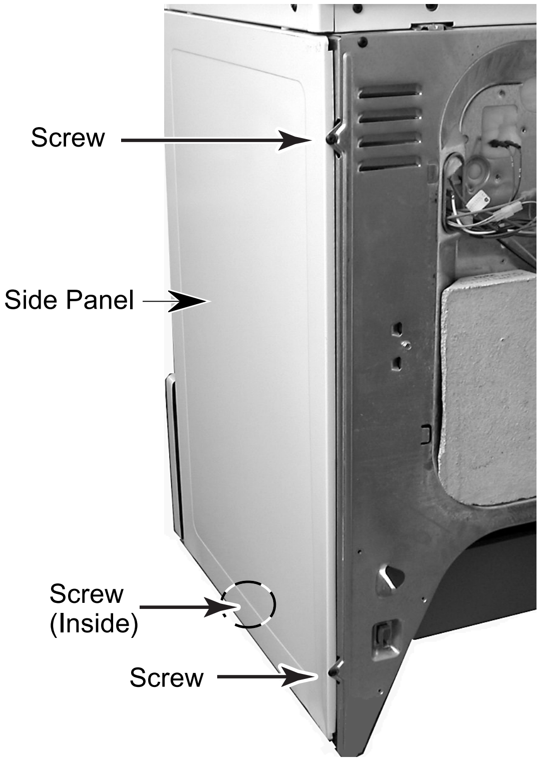
Electrical Shock Hazard

Disconnect power before servicing.

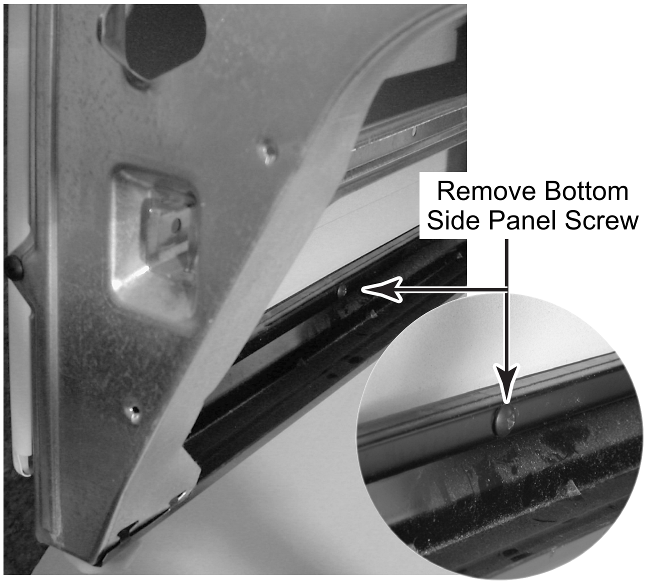
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

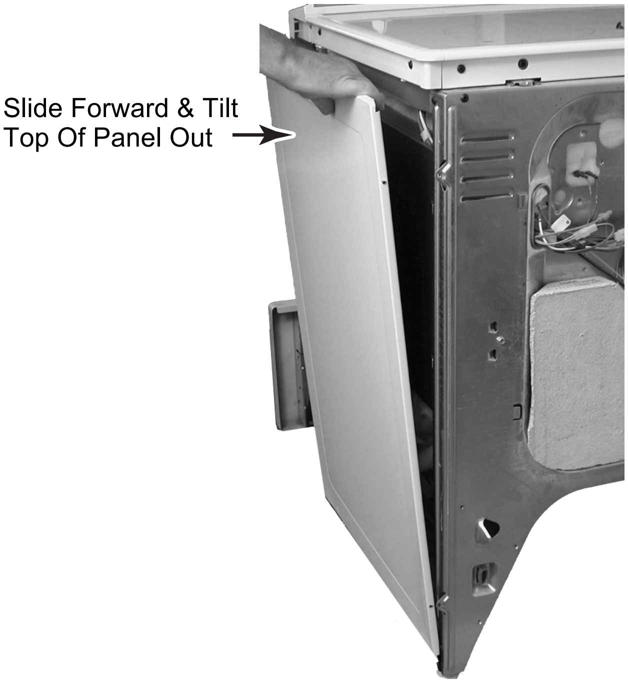
1. Unplug range or disconnect power.
2. Pull the range away from the wall so that you can access the rear of the unit.
3. Remove the oven door and set it aside (see page 4-22 for the procedure).
4. Pull the storage drawer out as far as it will go.
5. Remove the two rear screws from the side panel.


Screw
Side Panel
Screw (Inside)
Screw

6. From the rear of the unit, reach inside and remove the screw from the bottom of the side panel.


Remove Bottom Side Panel Screw

7. Slide the side panel forward and unhook the front edge, then tilt the top of the side panel out, and lift the panel from the unit.


Slide Forward & Tilt Top Of Panel Out

NOTE: When reinstalling the side panel, set the bottom edge on the rail, hook the front edge at the top and bottom, and install the two rear screws; then install the bottom screw from inside the rear of the unit.

REMOVING THE DOUBLE LINE BREAK (DLB) RELAY AND THE COOLING FAN MOTOR

⚠WARNING

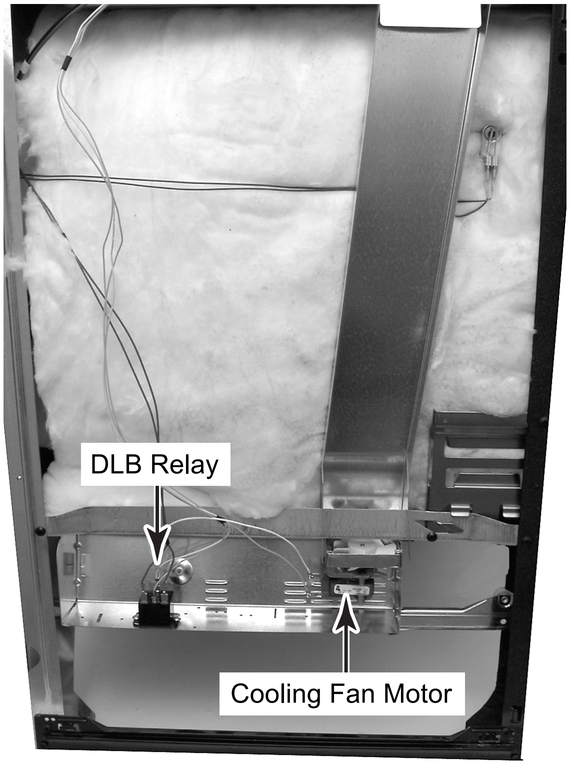
Electrical Shock Hazard

Disconnect power before servicing.

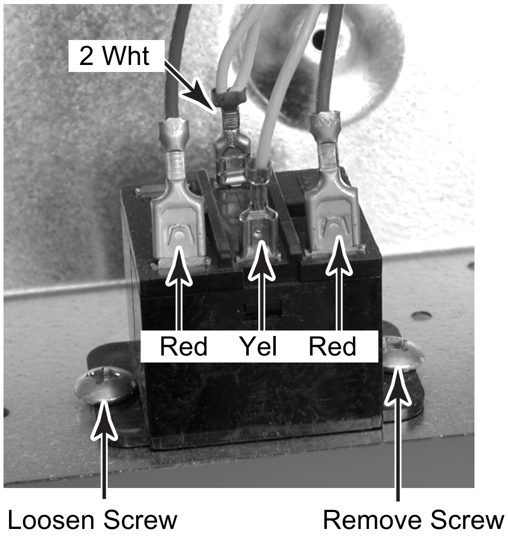
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

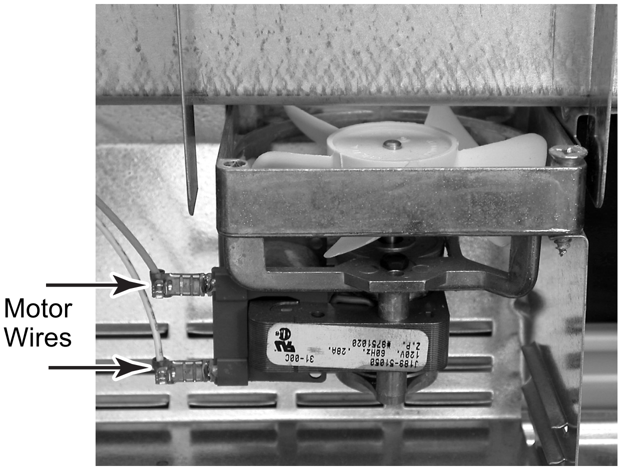
1. Unplug range or disconnect power.
2. Open the oven door and remove the racks from inside the oven.
3. Pull the range away from the wall so that you can access the rear of the unit.
4. Remove the left side panel (see page 4-19 for the procedure).



5. **To remove the double line break (DLB) relay:**
   a) Disconnect the wire connectors from the relay terminals.
   b) Remove one of the two relay mounting screws and loosen the other screw. Slide the relay out from under the loose screw and remove it from the housing.



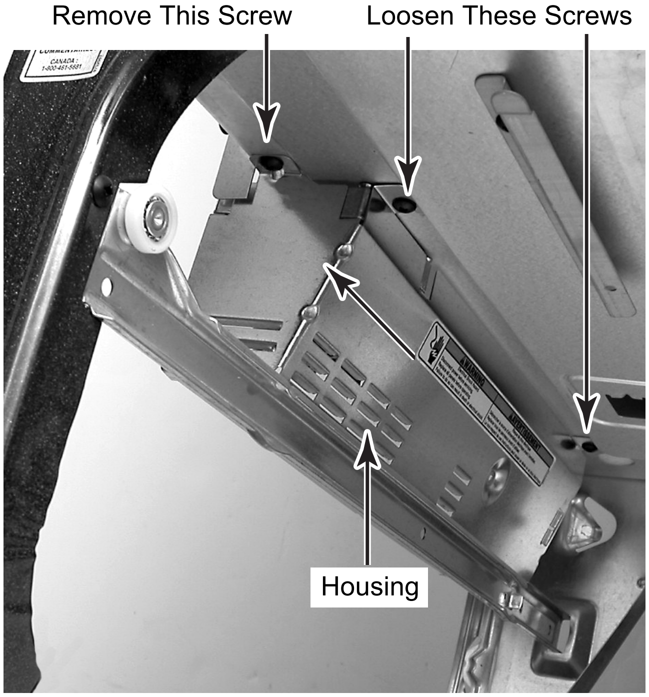
6. **To remove the cooling fan motor:**
   a) Disconnect the wire connectors from the cooling fan motor terminals.



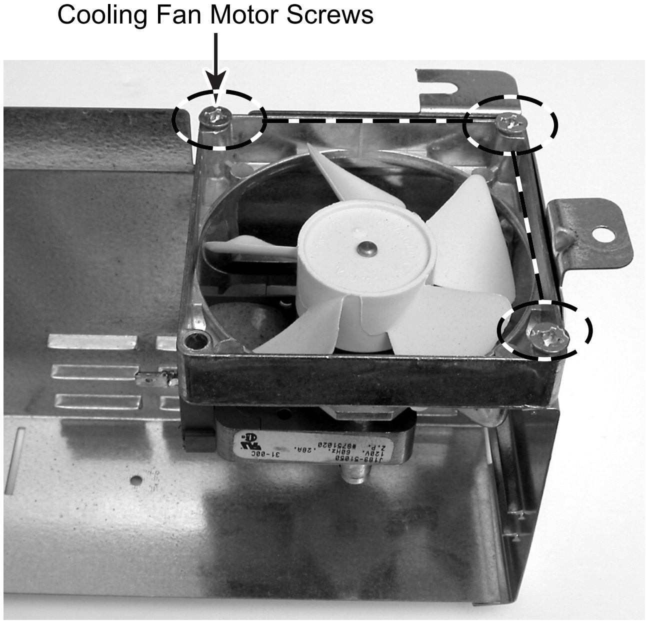
   b) Remove the storage drawer from the front of the unit.

c) From the storage drawer area, remove the front housing screw and loosen the other two screws.

d) Slide two of the three motor housing brackets out from under the two screws, and the other bracket out of the slot in the chassis, and remove the housing.

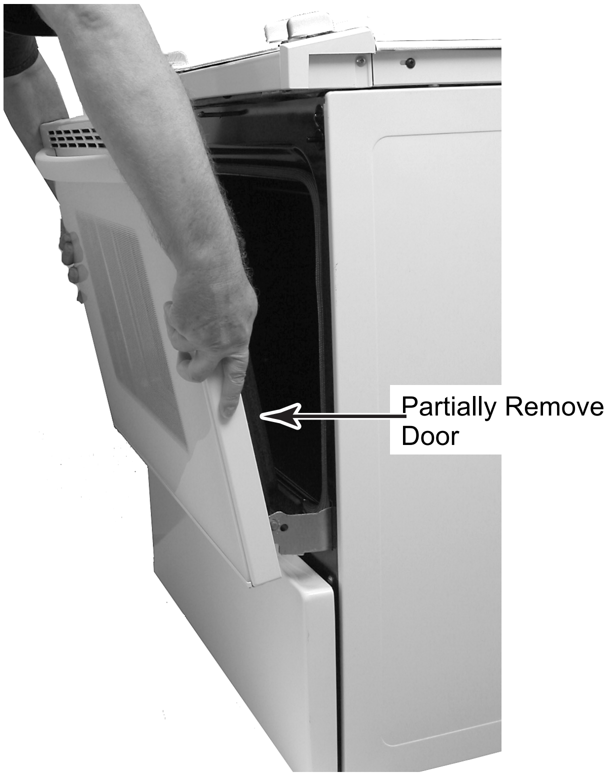

Remove This Screw
Loosen These Screws
Housing

e) Remove the three cooling fan motor mounting screws and remove the motor from the housing.

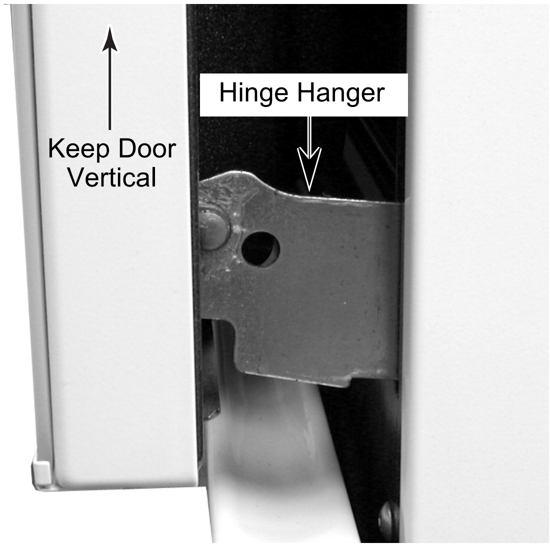

Cooling Fan Motor Screws

REMOVING THE OVEN DOOR

1. To remove the oven door, open the door to its first stop.
2. Grasp the sides of the door, lift it slightly, and pull the door forward until the hinge hangers are **partially** out of the slots in the chassis. Do not completely remove the hinge hangers from the slots, since there will be spring tension on them.



3. Reposition the angle of the door to its vertical position to remove the spring tension on the hinge hangers, then pull the hangers the rest of the way out of the chassis slots.

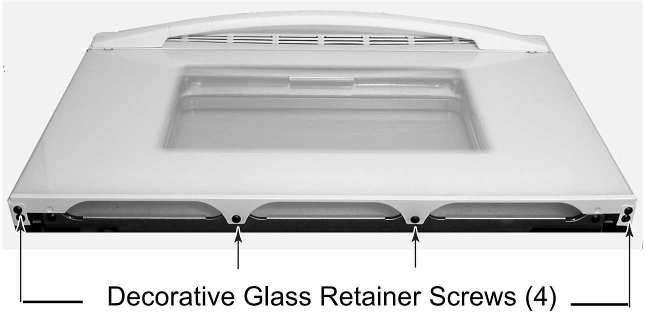


To reinstall the oven door:

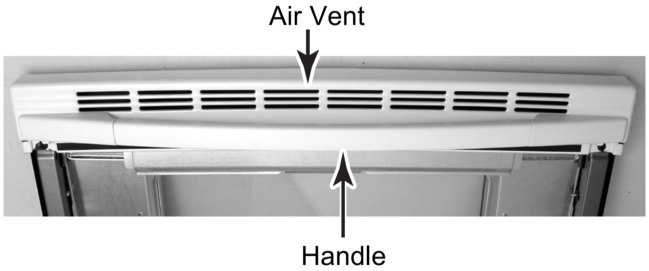
1. Grasp the sides of the door and insert the hinge hangers into the hinge slots. Lift the door slightly and push in at the bottom until the hangers are fully installed in the unit. NOTE: If the hinge hangers are not seated properly, the door will not close tightly and may be off-center. To seat the hinge hangers, keep the door vertical, then lift it slightly, and push in on the bottom until the hangers are fully seated.
2. Open and close the oven door to make sure that it operates and seals properly.

REMOVING THE DECORATIVE GLASS, THE OVEN DOOR HANDLE, THE HINGES, AND THE OVEN DOOR GLASS

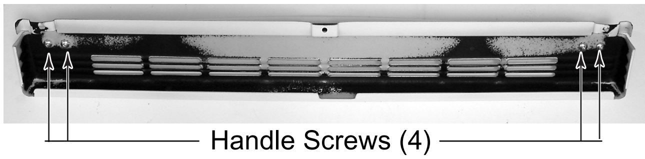
1. Remove the oven door from the range (see page 4-22 for the procedure).
2. Place the oven door on a padded work surface with the decorative glass and handle facing up and the bottom edge facing the front.
3. **To remove the decorative glass:**
   a) Remove the four decorative glass retainer screws, and remove the retainer and two side trims.
   b) Lift the decorative glass off the door.


Decorative Glass Retainer Screws (4)

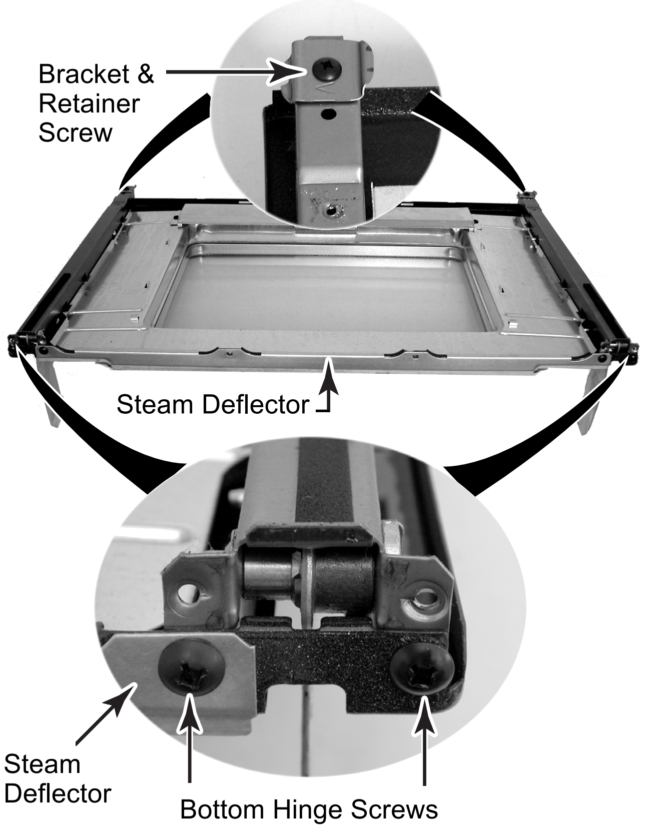
4. **To remove the door handle:**
   a) Lift the air vent and handle off the door.


Air Vent
Handle

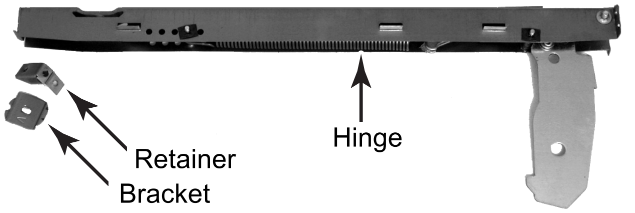
   b) Remove the four handle screws (two on each side) from the air vent and remove the handle.


Handle Screws (4)

5. **To remove a hinge:**
   a) Remove the two bottom screws from the hinge you are servicing. NOTE: If you are removing both hinges, remove the steam deflector. Note how the deflector is mounted between the two hinges.
   b) Remove the bracket and retainer screw from the top of the hinge.


Bracket & Retainer Screw
Steam Deflector
Steam Deflector
Bottom Hinge Screws

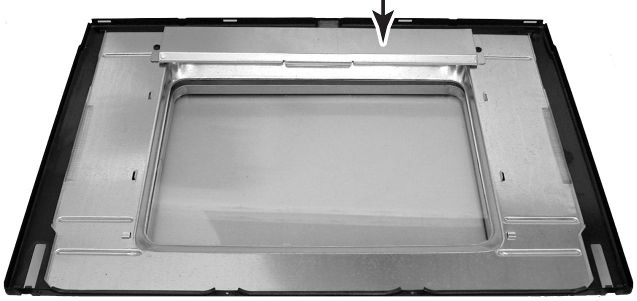
   c) Remove the bracket, retainer, and hinge from the door.


Retainer
Bracket
Hinge

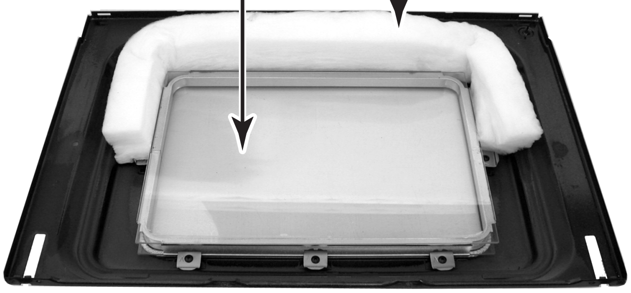
Continued on the next page.

6. **To remove the inner and outer oven door glass:**

   a) Lift the insulation retaining plate off the door.

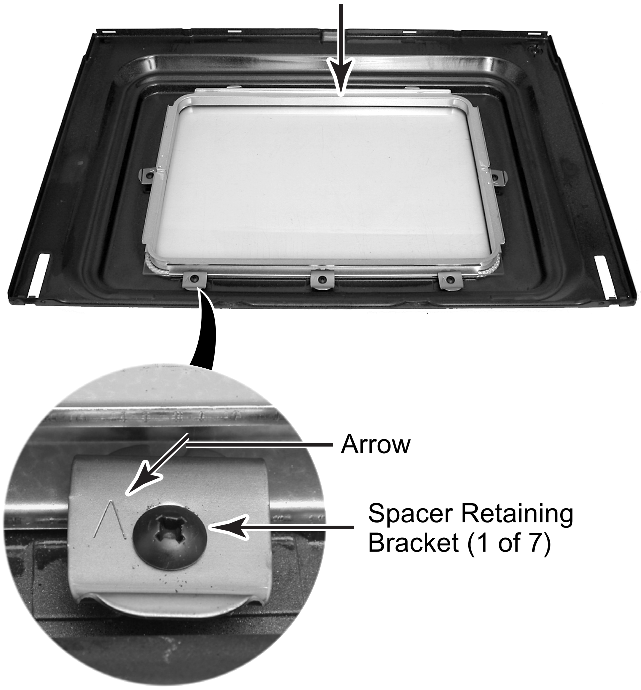

Insulation Retaining Plate

   b) Remove the insulation and outer oven glass from the door.

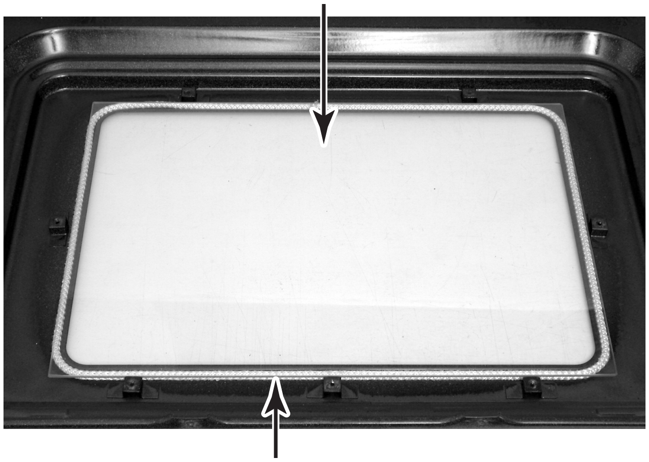

Insulation
Outer Oven Glass

   c) Remove the screws from the seven oven glass spacer retaining brackets and remove the brackets. NOTE: When you reinstall the brackets, make sure that you position the arrows on the brackets towards the glass spacer.

   d) Lift the glass spacer and the inner oven glass off the door.


Oven Glass Spacer
Arrow
Spacer Retaining Bracket (1 of 7)

   e) If you are replacing the rope insulation, remove it from around the oven glass opening in the door.


Inner Oven Glass
Rope Insulation

REMOVING THE OVEN DOOR GASKET

⚠WARNING

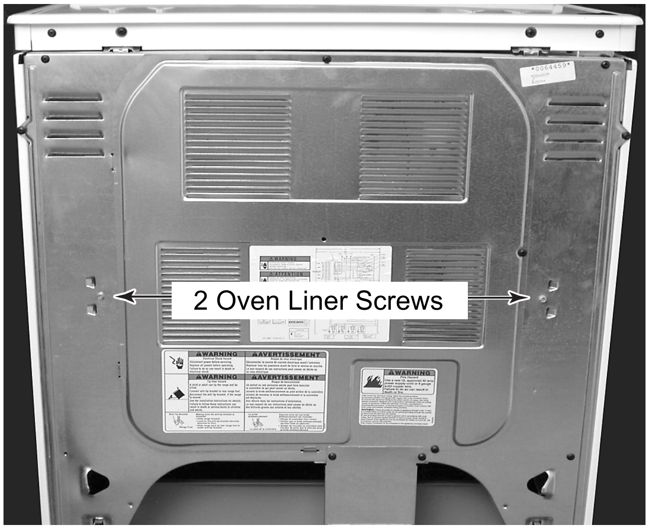
Electrical Shock Hazard

Disconnect power before servicing.

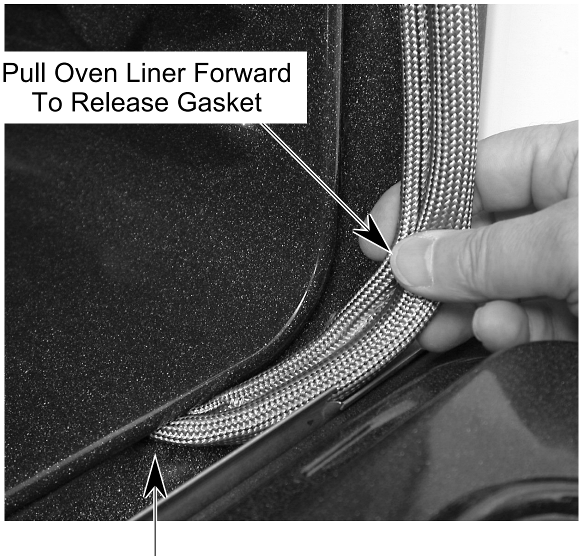
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

1. Unplug range or disconnect power.
2. Pull the range away from the wall so that you can access the rear of the unit.
3. Loosen the two oven liner screws so that the inside of the hex-head skirt is approximately 1/2″ from the chassis.


2 Oven Liner Screws

4. Pull the oven liner forward to loosen the oven door gasket from the front of the unit.
5. Starting at one end, pull the gasket out of the liner hole, and remove it from around the liner and the second hole.


Pull Oven Liner Forward To Release Gasket
Pull Door Gasket Out Of Hole And Remove From Liner

REASSEMBLY NOTE: After the door gasket is installed, make sure that it is even along the surface of the door when the door is closed.

— NOTES —

COMPONENT TESTING

Before testing any of the components, perform the following checks:

- The most common cause for control failure is corrosion on connectors. Therefore, disconnecting and reconnecting wires will be necessary throughout test procedures.
- All tests/checks should be made with a VOM or DVM having a sensitivity of 20,000 ohms-per-volt DC, or greater.
- Check all connections before replacing components, looking for broken or loose wires, failed terminals, or wires not pressed into connectors far enough.
- Resistance checks must be made with power cord unplugged from outlet, and with wiring harness or connectors disconnected.

⚠WARNING

Electrical Shock Hazard

Disconnect power before servicing.

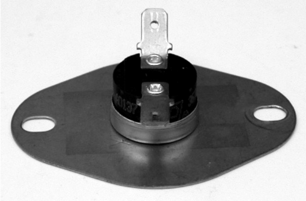
Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

BIMETAL SWITCH

Refer to page 4-2 for the procedure for servicing a bimetal switch.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R x 1 scale.
3. **For the ambient bimetal switch (N.C.)**, touch the ohmmeter test leads to the terminals. The meter should indicate continuity (0 Ω).
4. **For the cooling fan bimetal switch (N.O.)**, touch the ohmmeter test leads to the terminals. The meter should indicate an open circuit (infinite).



Ambient Bimetal Switch (N.C.)
Opens @ 96°C (205°F)
Resets @ 74°C (165°F)

Cooling Fan Bimetal Switch (N.O.)
Resets @ 70°C (158°F)
Closes @ 60°C (140°F)

⚠WARNING

Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

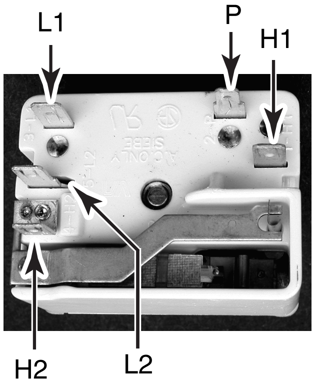
Failure to do so can result in death or electrical shock.

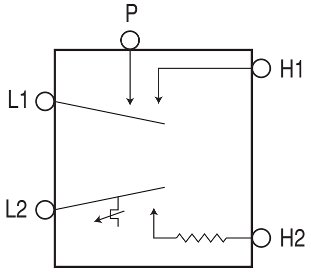
SINGLE ELEMENT INFINITE SWITCHES

Refer to page 4-2 for the procedure for servicing a single element infinite switch.

NOTE: Refer to the Wiring Diagram that is supplied with the unit to determine the wiring for the infinite switch you are servicing.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R x 1 scale.
3. Turn the appropriate infinite switch to the On position.
4. Touch the ohmmeter test leads to terminals L1 and P. The meter should indicate continuity (0 Ω).
5. Touch the ohmmeter test leads to terminals L1 and H1. The meter should indicate continuity (0 Ω).
6. Touch the ohmmeter test leads to terminals L2 and H2. The meter should indicate continuity (0 Ω).





⚠WARNING

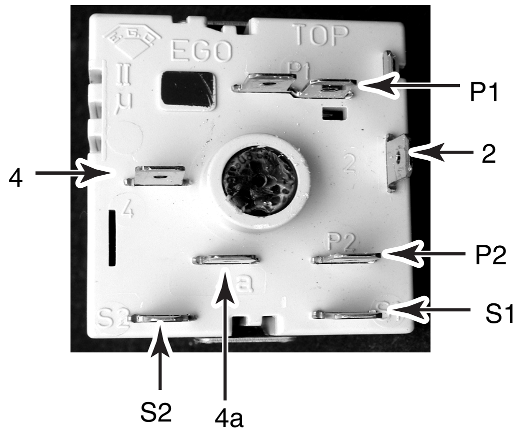
Electrical Shock Hazard

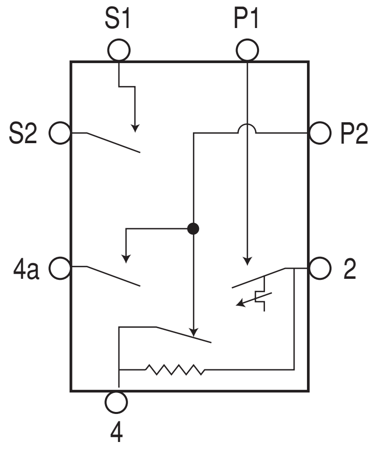
Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

DUAL ELEMENT INFINITE SWITCH (OPTIONAL)





Refer to page 4-2 for the procedure for servicing the dual element infinite switch.

NOTE: Refer to the Wiring Diagram that is supplied with the unit to determine the wiring for the infinite switch you are servicing.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R X 1 scale.
3. Turn the dual element infinite switch to the “single” position.
4. Touch the ohmmeter test leads to the following terminals. The meter should indicate continuity (0 Ω):
   a) S1 - S2
   b) P1 - 2
   c) P2 - 4
5. Set the ohmmeter to the R X 1K scale.
6. Touch the ohmmeter test leads to terminals 2 and 4. The meter should indicate approximately 5200 Ω.
7. Turn the dual element infinite switch to the “dual” position.
8. Set the ohmmeter to the R X 1 scale.
9. Touch the ohmmeter test leads to the following terminals. The meter should indicate continuity (0 Ω):
   a) S1 - S2
   b) P1 - 2
   c) P2 - 4
   d) P2 - 4a
10. Set the ohmmeter to the R X 1K scale.
11. Touch the ohmmeter test leads to terminals 2 and 4. The meter should indicate approximately 5200 Ω.

⚠WARNING

Electrical Shock Hazard

Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

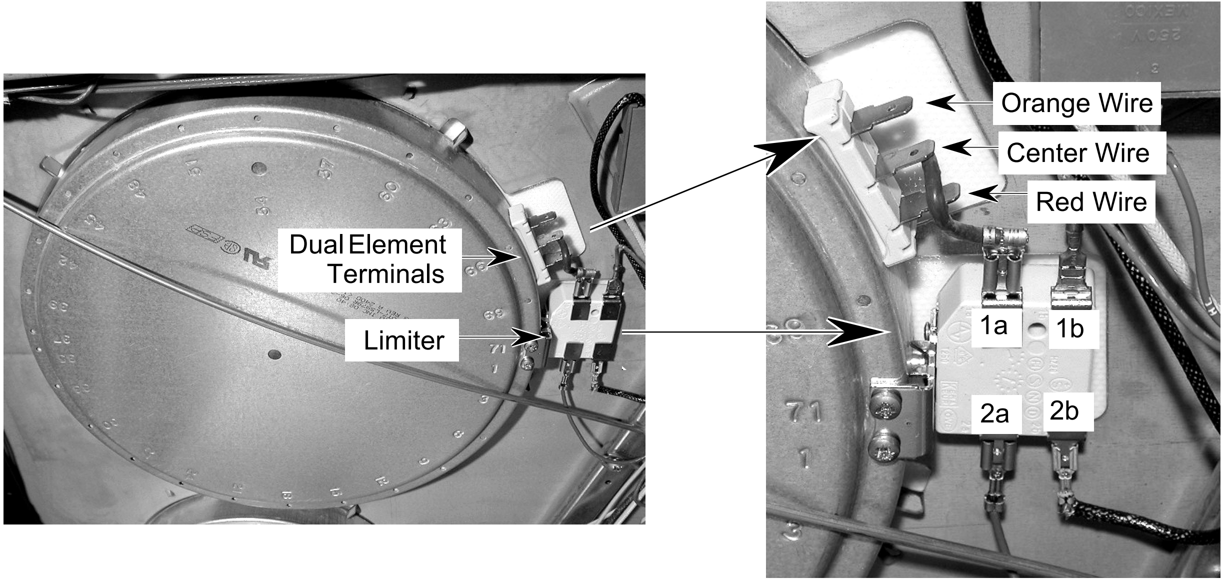
SURFACE ELEMENTS & LIMITERS

Refer to page 4-5 for the procedure for servicing the elements & limiters.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R X 1 scale.
3. Raise the cooktop.
4. **To test the left front (LF) dual element and limiter:**
    a) Disconnect the red wire from the element terminal.
    b) Disconnect the wires from limiter terminals 1a and 1b.
    c) Touch the ohmmeter test leads to the center wire terminal, and the terminal that had the red wire connected to it. The meter should indicate between 35 and 65 Ω.
    d) Reconnect the red wire and disconnect the orange wire from the dual element terminal.
    e) Touch the ohmmeter test leads to the center terminal and the terminal that had the orange wire connected to it. The meter should indicate between 25 and 55 Ω.
    f) Touch the ohmmeter test leads to limiter terminals 1a & 2a. The meter should indicate continuity (0 Ω).
    g) Touch the ohmmeter test leads to limiter terminals 1b & 2b.

    With the temperature below 150˚F, the meter should indicate an open circuit (infinite).

    With the temperature above 150˚F, the meter should indicate continuity (0 Ω).



5. **To test the RF, LR, & RR single elements & limiters:**

   a) Disconnect the yellow, brown, or blue wire from the element terminal.

   b) Disconnect the wires from limiter terminals 1a and 1b.

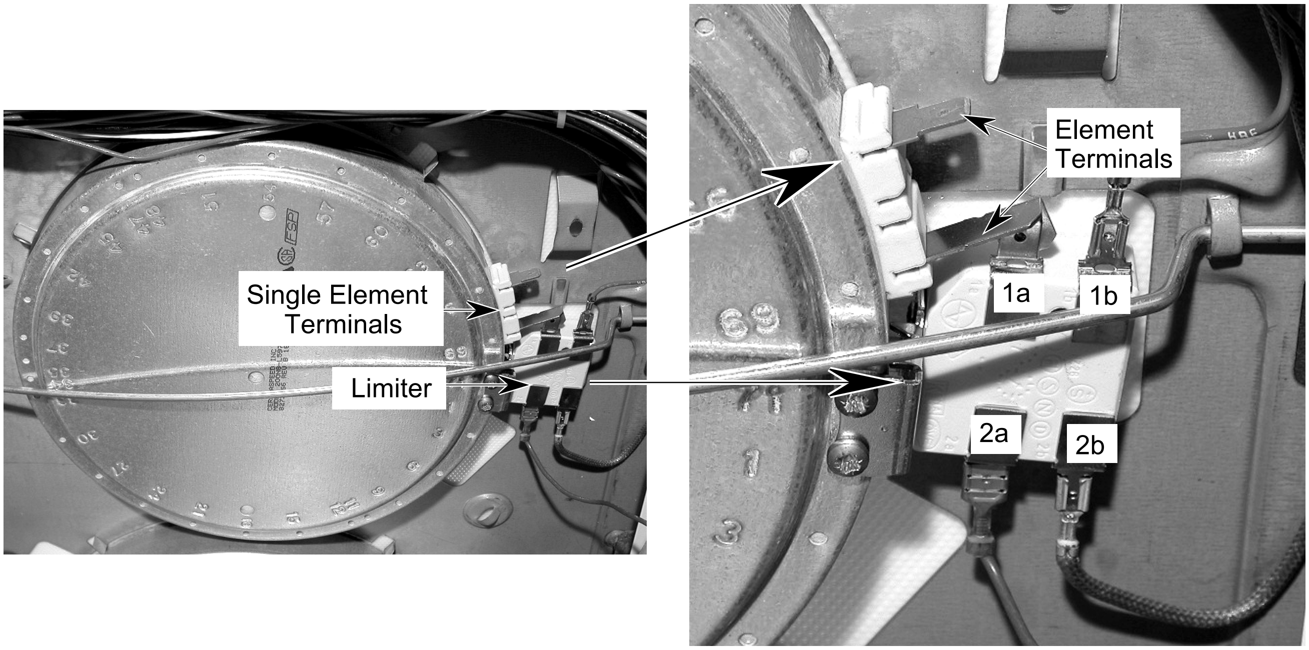
   c) Touch the ohmmeter test leads to the two element terminals. The meter should indicate between 20 and 40 Ω.

   d) Touch the ohmmeter test leads to limiter terminals 1a & 2a. The meter should indicate continuity (0 Ω).

   e) Touch the ohmmeter test leads to limiter terminals 1b & 2b.

   With the temperature below 150˚F, the meter should indicate an open circuit (infinite).

   With the temperature above 150˚F, the meter should indicate continuity (0 Ω).



⚠WARNING

Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

DOOR SWITCH (N.O.)

Refer to page 4-10 for the procedure for servicing the door switch.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R x 1 scale.
3. Touch the ohmmeter test leads to the door switch terminals. The meter should indicate an open circuit (infinite).
4. Press the actuator button and the meter should indicate continuity (0 Ω).

DOOR LATCH ASSEMBLY (N.O.)

Door Latch Solenoid

Door Latch Switch

Refer to page 4-10 for the procedure for servicing the door latch assembly.

1. Unplug range or disconnect power.
2. Disconnect one of the wires from the door latch assembly component under test.
3. Set the ohmmeter to the R x 1K scale.
4. **To test the solenoid,** touch the ohmmeter test leads to the terminals. The meter should indicate between 3000 and 3800 Ω.
5. **To test the door latch switch:**
   a) Touch the ohmmeter test leads to the COM and N.O. terminals. The meter should indicate an open circuit (infinite).
   b) With the ohmmeter leads connected as stated in the previous step, press the switch actuator. The meter should indicate continuity (0 Ω).

⚠WARNING

Electrical Shock Hazard

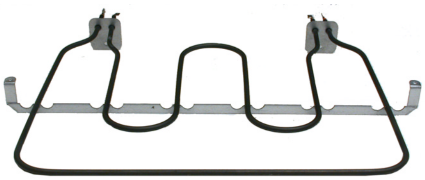
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

HIDDEN BAKE ELEMENT

Refer to page 4-12 for the procedure for servicing the hidden bake element.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R x 1 scale.
3. Touch the ohmmeter test leads to the bake element terminals. The meter should indicate between 40 and 60 Ω.

DUAL BROIL ELEMENT



Refer to page 4-12 for the procedure for servicing the dual broil element.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R x 1 scale.
3. Touch the ohmmeter test leads to the broil element terminals. The meter should indicate between 30 and 50 Ω.

⚠WARNING

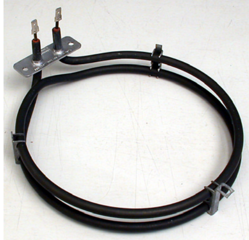
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

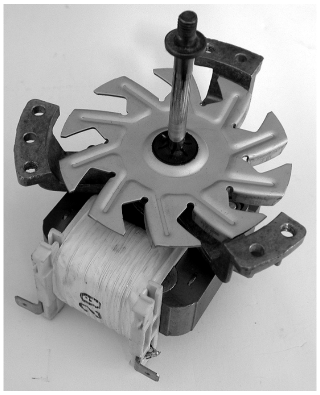
CONVECTION BAKE ELEMENT



Refer to page 4-14 for the procedure for servicing the convection bake element.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R x 1 scale.
3. Touch the ohmmeter test leads to the convection bake element terminals. The meter should indicate between 14 and 26 Ω.

CONVECTION FAN MOTOR



Refer to page 4-14 for the procedure for servicing the convection fan motor.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R x 1 scale.
3. Touch the ohmmeter test leads to the convection fan motor terminals. The meter should indicate between 9 and 13 Ω.

⚠WARNING

Electrical Shock Hazard

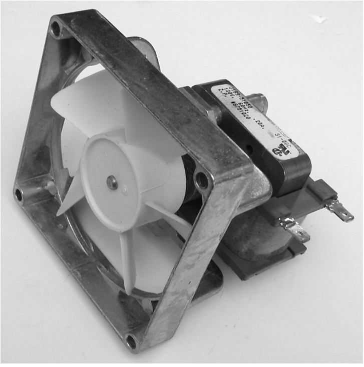
Disconnect power before servicing.
Replace all parts and panels before operating.
Failure to do so can result in death or electrical shock.

OVEN TEMPERATURE SENSOR

Refer to page 4-18 for the procedure for servicing the oven temperature sensor.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R x 100 scale.
3. Touch the ohmmeter test leads to the oven temperature sensor connector pins. The meter should indicate between 1000 and 1100 Ω at 75˚F.

COOLING FAN MOTOR



Refer to page 4-20 for the procedure for servicing the cooling fan motor.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R x 1 scale.
3. Touch the ohmmeter test leads to the cooling fan motor terminals. The meter should indicate between 55 and 75 Ω.

⚠WARNING

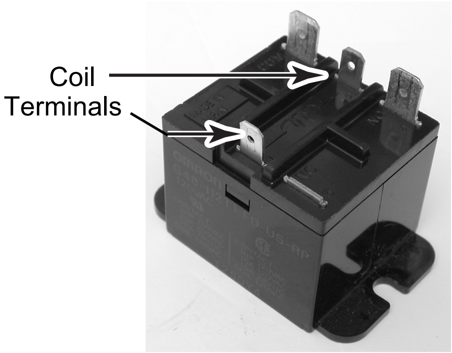
Electrical Shock Hazard

Disconnect power before servicing.

Replace all parts and panels before operating.

Failure to do so can result in death or electrical shock.

DOUBLE LINE BREAK (DLB) RELAY



Refer to page 4-20 for the procedure for servicing the double line break relay.

1. Unplug range or disconnect power.
2. Set the ohmmeter to the R x 100 scale.
3. Touch the ohmmeter test leads to the coil terminals. The meter should indicate approximately 4100 Ω.

DIAGNOSIS & TROUBLESHOOTING

DIAGNOSIS

FAILURE/ERROR DISPLAY CODES TECH SHEET #9753028, REV. B

- All diagnoses of this range must begin with a normal check of the line voltage, blown fuses, and failed components.
- All units that have failed during the first few days of use should be checked for loose connections, or miswiring.
- All checks should be made with a meter having a sensitivity of 20,000 ohms-per-volt, or greater.

FAULT	ERROR	FAULT PRIORITY	FAULT CONSTANT NAME IN SOFTWARE	FAULT DESCRIPTION	FIELD SERVICE ACTION
F1	E0	N/A	Fault EEPROM	EEPROM read fault (silent fault, not displayed)	Replace control
	E1	N/A	EEPROM checksum error	EEPROM checksum does not match at start key (silent fault, not displayed)	Replace control
	E3	7	Config jumpers no match	Configuration jumper change, ranges with front control and fluorescent light: electric switches or P9 pins 6 and/or 7 changed since power up	See below left
	E4	2	Q8 shorted	Q8 shorted	Replace control
	E9	0	Stack overflow	Stack overflow, highest priority	Replace control
F2	E0	4	Keypad switch assy misconnected	Keypad switch assy misconnected to control	Verify insertion of ribbon into timer connector. Replace keypad sw assy
	E2	3	Cancel key channel	Cancel key loop test failed	Replace keypad sw. assy
	E3	5	Key down too long	Key held down too long or keyboard short	Press Cancel. Wait 2 sec. between each key entry. If reappears replace keypad switch assy
	E4	6	Keys unsettled	Keys unsettled probably due to noise	Press Cancel. Remove electrical noise source. If reappears replace keypad switch assy
	E5	N/A	Cancel key failed	Cancel key failed	Replace keypad switch assy
F3	E0	9	Open oven sensor	Oven sensor open	Replace oven sensor
	E1	8	Shorted oven sensor	Shorted oven sensor	Replace oven sensor
	E2	10	Oven temp too high	Oven temp too high (runaway)	Replace oven sensor, or control
F4	E1	15	Shorted meat probe	Meat probe shorted (less than 1500 ohms)	Replace meat probe
F5	E0	N/A	Door open and locked	Door locked somehow with door open	Check door switch, latch switch
	E1	13	Self clean latch won't make	Self clean latch lock make after 30 seconds	Check latch system
	E3	1	Loss of GND, L1 N reverse	Loss of 120 VAC across L1 to ground or Q19 circuit error	Check ground continuity on all ground harnesses. Replace control
	E5	14	Self clean temp not satisfied	Self clean temperature not satisfied after 30 minutes	Check insertion of hinges in receivers. Check operation of elements.
	E6	16	Door open and locked	Door locked somehow with door open	Check door switch, latch switch
	E7	17	Door will not unlatch	Door unlocked somehow and will not unlatch	Check door switch, latch switch
F6	E0	12	Ambient over temp	Ambient (console bi-metal) sensor opened (too hot)	Check control bi-metal
F7	E0	11	Input switch error	Input switches won't follow their strobe level (shorted to ground)	Check door switch, latch switch, etc.
PF				Power Failure (Not a Failure Mode)	Do not replace control

FAULT ERROR CODE CHARTS

FAULT CODE	FIELD SERVICE MEANING
F1	Control
F2	Keypad Assembly
F3	Temp Sensor
F4	Meat Probe
F5	Input Switch
F6	Sensor or Control
F7	Keypad or Control

FAULT ERROR: F1E3		
NOTE: Make sure harness to P1 connector is correct per wiring diagram before performing the following steps!		
STEP 1	Power down and wait 5 seconds	
STEP 2	Power up and wait 5 seconds	
STEP 3	Press the following keys:	
	CONVECTION	NON-CONVECTION
	CONV. BROIL CLEAN BAKED GOODS STOP TIME 1 9 0 TIMER SET	CLEAN STOP TIME 0 OVEN LIGHT 1
STEP 4	Press START	
STEP 5	Make sure Timer ID is the same as the oven	
STEP 6	Press CANCEL to exit	

TROUBLESHOOTING CHARTS

PROBLEM	POSSIBLE CAUSE	SOLUTION
Clock display does not display 4 number eights after power-on test.	Loose or bad wiring.	Repair or replace wiring (see wiring diagrams).
	Burned out or missing segment in clock display.	Make sure clock display is properly seated.
	Broken or missing terminal on microcomputer.	Replace microcomputer board.
Oven cooks but display does not count down in cooking cycle.	Loose or bad wiring to harness.	Repair or replace wiring (see wiring diagrams).
	Failed microcomputer board.	Replace microcomputer board.
Oven element emits black smoke when first turned on.	This is normal on a new range. The factory-applied protective coating is burning off.	Protective coating will burn off in several minutes. Fumes are non-toxic.
	Substance (e.g. food or other material) has spilled onto the element.	Let element cool then clean according to Use & Care instructions.
Oven element does not heat.	No line voltage.	Check circuit breaker.
	Loose or bad wiring.	Repair or replace wiring (see wiring diagrams).
	Defective element.	Test and/or replace element.
Cooktop element barely heats.	Low line voltage.	Line voltage should be minimum 240-volts. If necessary, electrician should repair cause for low line voltage.
	Loose or bad wiring connection at element or terminal block.	Repair or replace wiring (see wiring diagrams).
	Defective cooktop control switch.	Test and/or replace switch.

PROBLEM	POSSIBLE CAUSE	SOLUTION
Cooktop element will not heat higher than low-medium.	Low line voltage. Defective cooktop element.	Line voltage should be minimum 240-volts. Electrician should repair cause for low line voltage. Test and/or replace element.
Cooktop element heats up normally, but drops to lower setting automatically.	Customer using improper cookware. Defective cooktop control switch.	Evaluate suitability of cookware. Test and/or replace switch.
Indicator light does not light up.	Loose or bad wiring to indicator light. Defective indicator light. Defective cooktop control switch.	Repair or replace wiring (see wiring diagrams). Replace indicator light. Test and/or replace switch.
Hot surface indicator light does not work.	Loose or defective light. Loose or bad wiring to indicator light assembly.	Replace indicator light. Replace indicator light assembly and wiring.
Oven light fails to operate.	Bulb burned out. Circuit breaker or fuse is open. Defective switch.	Replace bulb. Check circuit breaker or replace fuse. Check continuity and/or replace switch.
Door locks but indicator lights do not light. Oven does not begin clean cycle.	Defective indicator light. Defective latch safety switch.	Replace indicator light. Replace switch.
Electronic timer will not accept programming.	Failed electronic board.	Replace timer.
Timer relay(s) do not close.	Loose or bad wiring to timer. Failed electronic board.	Repair or replace wiring (see wiring diagrams). Replace timer.
Oven will not bake (selection is set for to BAKE).	If indicator light lights up bake element is defective. Defective latch safety switch. Loose or bad wiring.	Check and/or replace bake element. Check continuity and/or replace switch. Repair or replace wiring (see wiring diagrams).
Oven will not bake (selection is set for TIMED BAKE).	Defective electronic clock.	Check continuity and/or replace clock (see wiring diagrams).

PROBLEM	POSSIBLE CAUSE	SOLUTION
Oven does not broil.	If indicator light lights up broil element is defective. Defective latch safety switch. Loose or bad wiring.	Check and/or replace broil element. Check continuity and/or replace switch. Repair or replace wiring (see wiring diagrams).
Oven door will not open or latch.	Defective latch mechanism. Defective (bent) door latch lever. Cool-down period after self-clean cycle not complete.	Replace mechanism. Replace lever. Wait until LOCK light goes out.
Overheating or “runaway” oven.	Loose or bad wiring to latch safety switch. Thermostat sensor bulb missing.	Repair or replace wiring (see wiring diagrams). Replace bulb.
Premature burnout of bake element.	Improper use of oven (e.g. being used to heat the home).	Use oven for baking only.
Oven door difficult to open.	Worn or broken broil stop rollers.	Replace rollers.
Door sagging on one side.	Hinge loose or out of position to oven liner.	Adjust hinges.
Door does not close completely at top.	Broken or misadjusted door spring. Door fits too tight at bottom.	Adjust or replace spring. Adjust hinges outward.
Door glass breaks.	Broiling with door closed. Oven racks covered with foil. Glass installed backward.	Open door to broil stop position. Do not cover racks with foil. Install tempered glass toward the heat.
Damaged oven door gasket.	Improper cleaning.	Do not use harsh abrasives or scouring pads. See Use & Care instructions.
Chipped oven liner.	Damaged in shipping.	Repair or replace liner. To repair smooth porcelain bronzetone, order P/N 242756.
Oven racks fit too tight.	Tolerance buildup in oven liner.	Notify Customer Assurance Department.

OVEN TEMPERATURE CALIBRATION

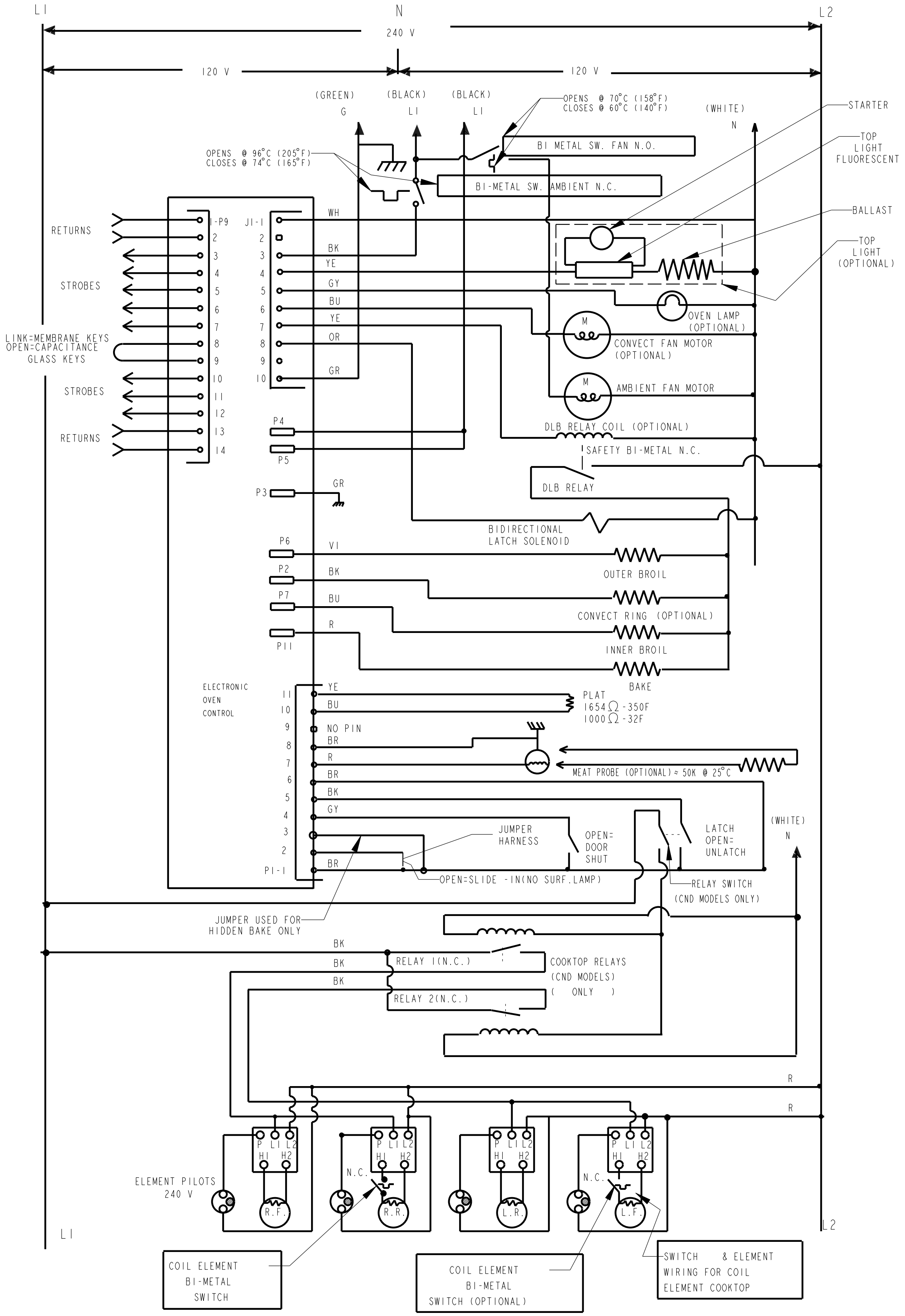
1. Press and hold the BAKE keypad for five (5) seconds. The current offset, if any, will be shown in the 3-digit display. CAL is shown in the 4-digit display (3 digits on right).
2. Pressing the TEMP keypad ▲ up arrow adjusts the temperature in 10˚F increments in the following sequence: 0˚, 10˚, 20˚, 30˚, -30˚, –20˚, –10˚, 0˚, and so on.
3. Press the START/ENTER keypad to activate the desired temperature adjustment. If the START/ENTER keypad is not pressed within 5 minutes, the adjustment is ignored.

NOTE: The BAKE temperature adjustment cannot result in operating temperatures higher than 525˚F, or lower than 170˚F, as measured at oven cavity center. Once the BAKE temperature has been adjusted, BROIL temperatures are automatically offset to the same degree.

The CLEAN temperature is also offset automatically when the BAKE temperature is adjusted. If the BAKE temperature has been raised, the CLEAN temperature is offset by +5˚F. If the BAKE temperature has been lowered, the CLEAN temperature is offset to –5˚F.

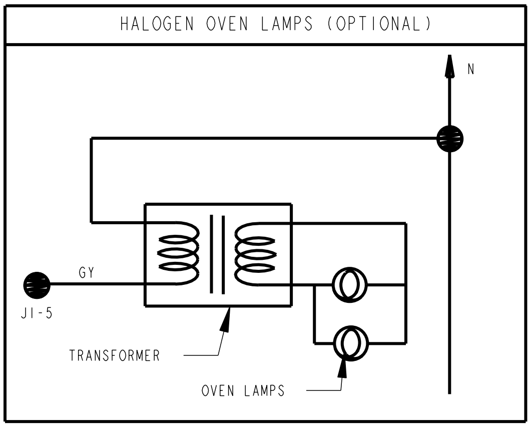
WIRING DIAGRAM & STRIP CIRCUITS

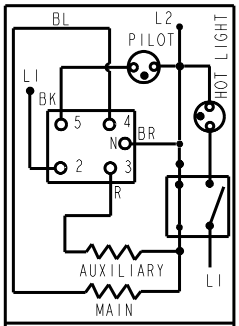
WIRING DIAGRAM — #9753028, REV. B



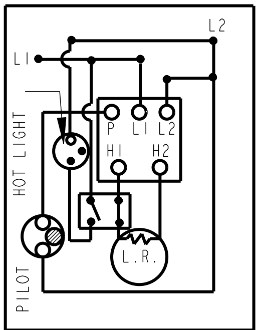
L1
N
L2
240 V
120 V
120 V
(GREEN)
G
(BLACK)
L1
(BLACK)
L1
OPENS @ 70°C (158°F)
CLOSES @ 60°C (140°F)
(WHITE)
N
STARTER
TOP LIGHT FLUORESCENT
BI METAL SW. FAN N.O.
OPENS @ 96°C (205°F)
CLOSES @ 74°C (165°F)
BI-METAL SW. AMBIENT N.C.
BALLAST
TOP LIGHT (OPTIONAL)
RETURNS
STROBES
LINK=MEMBRANE KEYS
OPEN=CAPACITANCE GLASS KEYS
STROBES
RETURNS
1-P9
J1-1
WH
BK
YE
GY
BU
YE
OR
GR
OVEN LAMP (OPTIONAL)
CONVECT FAN MOTOR (OPTIONAL)
AMBIENT FAN MOTOR
M
P4
P5
DLB RELAY COIL (OPTIONAL)
SAFETY BI-METAL N.C.
DLB RELAY
P3
GR
BIDIRECTIONAL LATCH SOLENOID
P6
VI
P2
BK
P7
BU
P11
R
OUTER BROIL
CONVECT RING (OPTIONAL)
INNER BROIL
BAKE
ELECTRONIC OVEN CONTROL
YE
BU
NO PIN
BR
R
BR
BK
GY
BR
P1-1
PLAT
1654 Ω -350F
1000 Ω -32F
MEAT PROBE (OPTIONAL) ≈ 50K @ 25°C
JUMPER HARNESS
OPEN= DOOR SHUT
LATCH OPEN= UNLATCH
(WHITE)
N
OPEN=SLIDE -IN(NO SURF.LAMP)
RELAY SWITCH (CND MODELS ONLY)
JUMPER USED FOR HIDDEN BAKE ONLY
BK
BK
BK
RELAY 1(N.C.)
RELAY 2(N.C.)
COOKTOP RELAYS (CND MODELS) (ONLY)
R
R
P L1 L2 H1 H2
ELEMENT PILOTS 240 V
N.C.
R.F.
R.R.
L.R.
L.F.
L1
L2
COIL ELEMENT BI-METAL SWITCH
COIL ELEMENT BI-METAL SWITCH (OPTIONAL)
SWITCH & ELEMENT WIRING FOR COIL ELEMENT COOKTOP

HALOGEN OVEN LAMPS (OPTIONAL)


N
GY
JI-5
TRANSFORMER
OVEN LAMPS


BL
L2
PILOT
HOT LIGHT
LI
BK
5
4
N
BR
2
3
R
AUXILIARY
MAIN
LI

OPTIONAL DUAL ELEMENT
CERAMIC COOKTOP


L2
LI
HOT LIGHT
P
LI
L2
HI
H2
L.R.
PILOT

L.F. L.R. R.F. ELEMENT
CERAMIC COOKTOP

CLEAN-HIDDEN BAKE MODELS	CLEAN (DOOR LOCK)	(RAISING BREAD, DEHYDRATE)	CONV BAKE	CONV ROAST	CONV BROIL	MAXI BROIL	ECONO BROIL	BAKE	OFF	MODES / OVEN RELAY
		NORMAL	PRE HEAT							
○	●	○	●	●	○	○	○	●	○	BAKE
●	○	○	○	○	●	●	●	○	○	BROIL INNER
●	●	○	●	●	●	●	○	●	○	BROIL OUTER
○	○	●	○	○	○	○	○	○	○	CONV ELEM
○	○	●	●	●	●	○	○	○	○	CONV FAN
○	○	X	X	X	X	X	X	X	X	OVEN LIGHT
●	●	○	○	○	○	○	○	○	○	DOOR LOCK SWITCH
●	●	●	●	●	●	●	●	●	○	DLB
X	X	X	X	X	X	X	X	X	X	TOP LIGHT

LEGEND

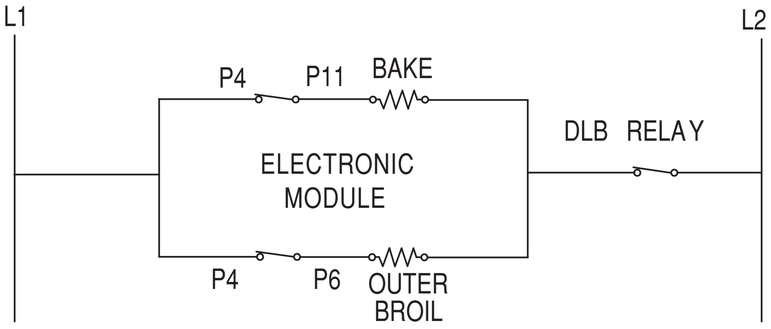
○ = OFF

● = ON (CYCLES)

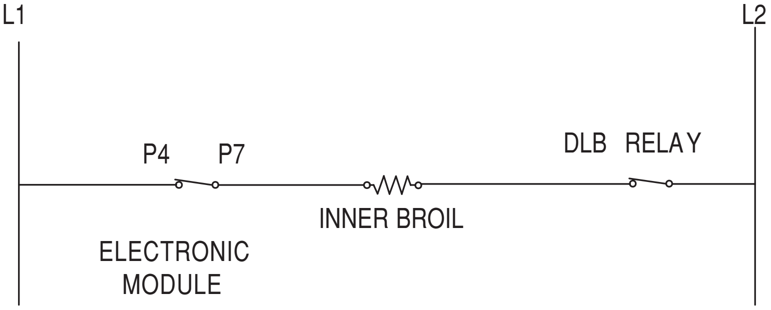
X = CAN BE OFF OR ON
(USER SETTING)

STRIP CIRCUITS

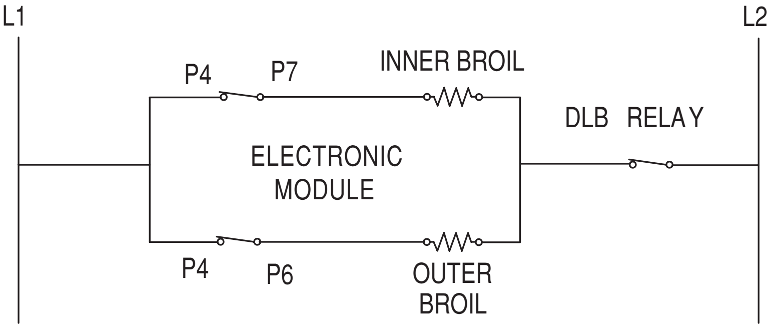
BAKE (INCLUDING PRE-HEAT)


L1
L2
P4
P11
BAKE
DLB RELAY
ELECTRONIC
MODULE
P4
P6
OUTER
BROIL

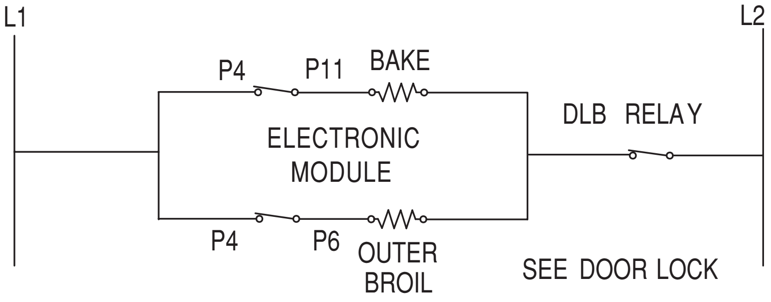
BROIL (ECONO)


L1
L2
P4
P7
DLB RELAY
INNER BROIL
ELECTRONIC
MODULE

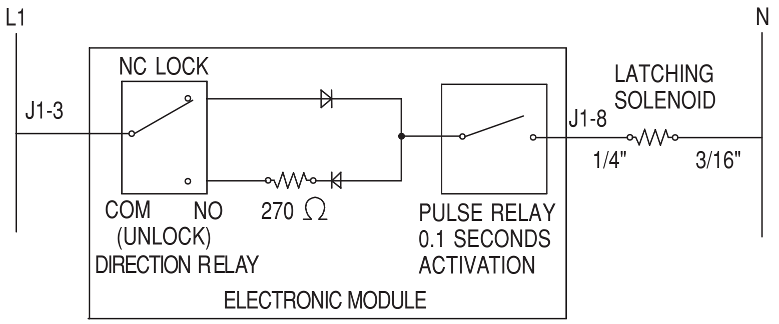
BROIL (MAXI)


L1
L2
P4
P7
INNER BROIL
DLB RELAY
ELECTRONIC
MODULE
P4
P6
OUTER
BROIL

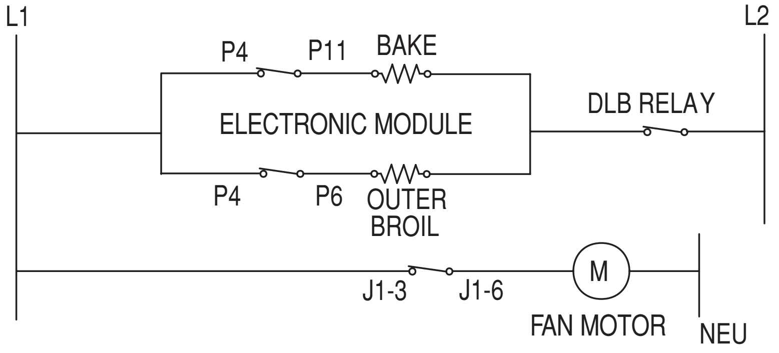
CLEAN


L1
L2
P4
P11
BAKE
DLB RELAY
ELECTRONIC
MODULE
P4
P6
OUTER
BROIL
SEE DOOR LOCK

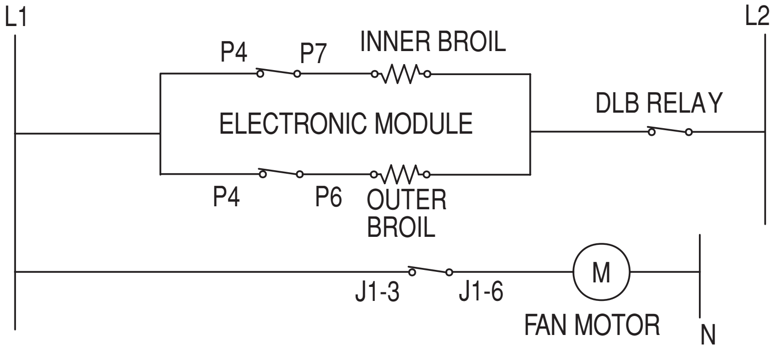
DRIVING CIRCUIT


L1
N
NC LOCK
J1-3
LATCHING
SOLENOID
J1-8
1/4"
3/16"
COM
NO
270 Ω
(UNLOCK)
DIRECTION RELAY
PULSE RELAY
0.1 SECONDS
ACTIVATION
ELECTRONIC MODULE

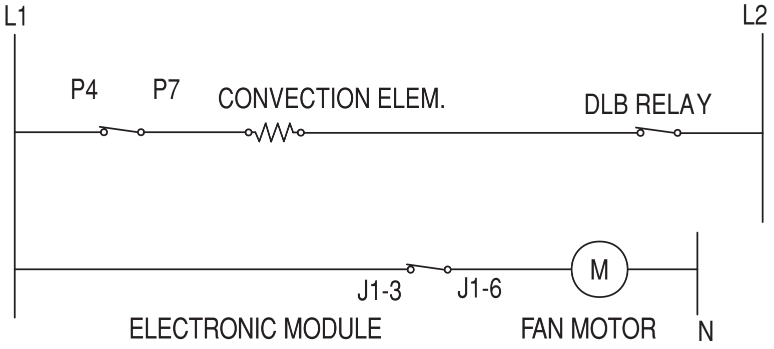
CONVECTION ROAST (AND PRE-HEAT FOR CONVECTION BAKE, DEHYDRATE, RAISING BREAD)


L1
L2
P4
P11
BAKE
ELECTRONIC MODULE
DLB RELAY
P4
P6
OUTER
BROIL
M
J1-3
J1-6
FAN MOTOR
NEU

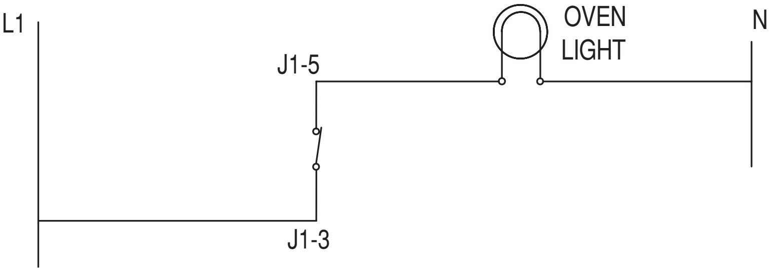
CONVECTION BROIL


L1
L2
P4
P7
INNER BROIL
ELECTRONIC MODULE
DLB RELAY
P4
P6
OUTER
BROIL
M
J1-3
J1-6
FAN MOTOR
N

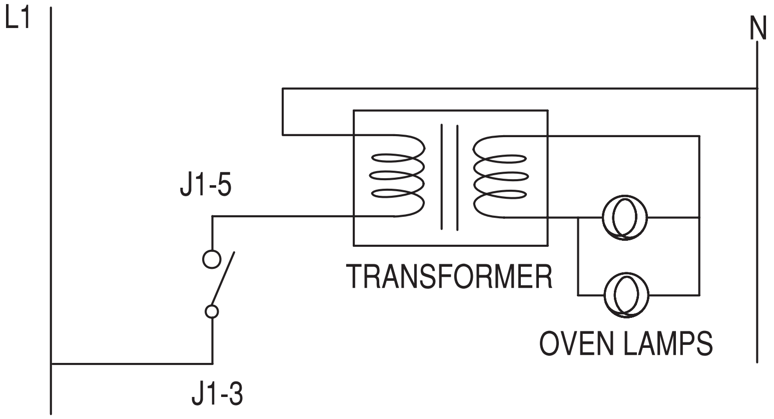
CONVECTION BAKE, DEHYDRATE, RAISING BREAD
(Dehydrate: Open Oven Door)


L1
L2
P4
P7
CONVECTION ELEM.
DLB RELAY
M
J1-3
J1-6
ELECTRONIC MODULE
FAN MOTOR
N

OVEN LIGHT (OPTIONAL)


L1
OVEN LIGHT
N
J1-5
J1-3

HALOGEN OVEN LIGHTS (OPTIONAL)


L1
N
J1-5
TRANSFORMER
OVEN LAMPS
J1-3

— NOTES —

PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION SOURCES

IN THE UNITED STATES:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:

FOR WHIRLPOOL PRODUCTS: 1-800-253-1301
FOR KITCHENAID PRODUCTS: 1-800-422-1230
FOR ROPER PRODUCTS: 1-800-447-6737

FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 1-800-253-2870

HAVE YOUR STORE NUMBER READY TO IDENTIFY YOU AS AN AUTHORIZED SERVICER

FOR LITERATURE ORDERS:

PHONE: 1-800-851-4605

IN CANADA:

FOR PRODUCT SPECIFICATIONS AND WARRANTY INFORMATION CALL:

1-800-461-5681

FOR TECHNICAL ASSISTANCE WHILE AT THE CUSTOMER'S HOME CALL:

THE TECHNICAL ASSISTANCE LINE: 1-800-488-4791

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